EXHIBIT 2

STATE OF CALIFORNIA

THE RESOURCES AGENCY

DEPARTMENT OF FISH AND GAME

PROPOSED MITIGATED NEGATIVE DECLARATION

FOR

THE 2002 FISHERY RESTORATION GRANTS PROGRAM IN DEL NORTE, HUMBOLDT, LAKE, MENDOCINO, SAN MATEO, SANTA CRUZ, SISKIYOU, AND SONOMA COUNTIES AND REQUIRED AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

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This Report Has Been Prepared Pursuant to the
California Environmental Quality Act of 1970
State of California
The Resources Agency
Department of Fish and Game

INITIAL STUDY AND MITIGATED NEGATIVE DECLARATION FOR THE 2002 FISHERY RESTORATION GRANTS PROGRAM IN DEL NORTE, HUMBOLDT, LAKE, MENDOCINO, SAN MATEO, SANTA CRUZ, SISKIYOU, AND SONOMA COUNTIES AND REQUIRED AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION

The Project: This project will use grant funds approved by the California Legislature to initiate activities that are designed to restore salmon and steel head habitat in coastal streams and watersheds. Years of poor land management and natural events have limited the ability of fish to survive and successfully reproduce in coastal streams that historically produced large populations of salmon and steelhead. This proposed project is designed to increase populations of wild anadromous fish in coastal streams by restoring their habitat.

The project objective is to improve spawning success for adult salmon and steelhead as well as increase survival for eggs, embryos, rearing juveniles, and downstream migrants. Bank stabilization treatments will improve spawning conditions and embryo survival by reducing sediment yield to streams. Upslope road decommissioning~orTepair will also help address these widespread problems. The replacement of barrier culverts with bridges or natural stream bottom culverts will allow adult and juvenile salmon ids access to additional spawning and rearing habitat. The installation of the instream structures will recruit and sort spawning gravel for adult salmon and steelhead, and create summer rearing pool and over-wintering habitat for juveniles.

The Finding: Although the project may have the potential to cause minor short-term impacts on soil, vegetation, wildlife, water quality, and aquatic life, the measures that will be incorporated into the project will lessen such impacts to an insignificant level (see initial study and environmental checklist).

Basis for the Finding: Based on the initial study, it was determined that there would not be significant adverse environmental effects resulting from implementing the proposed project. In addition, the project is expected to achieve a net benefit to the environment by enhancing and maintaining quality salmonid spawning and rearing habitat in the eight-county project area.

The Department of Fish and Game finds that implementing the proposed project will have no significant environmental impact.

Therefore, this mitigated negative declaration is filed pursuant to the California Environmental Quality Act (CEQA), Public Resources Code Section 21080 (c2). This proposed mitigated negative declaration consists of all of the following:

. Detailed Project Description and Background Information
. Initial Study Environmental Checklist Form
. Explanation of Response to Initial Study Environmental Checklist Form
. Appendix A. Project Action Items
. Appendix B. Mitigation Measures, Monitoring and Reporting Program For the 2002 Fishery Restoration Grants Program
. Appendix C. Guidelines for Conducting Project Specific Endangered, Rare and Threatened Species Surveys . Attachment 1. U. S. Army Corps of Engineers Permit #22323N . Attachment 2. National Marine Fisheries Service (NMFS) Non-Jeopardy Biological Opinion

DETAILED PROJECT DESCRIPTION AND BACKGROUND INFORMATION

FOR

THE 2002 FISHERY RESTORATION GRANTS PROGRAM IN DEL NORTE, HUMBOLDT, LAKE, MENDOCINO, SAN MATEO, SANTA CRUZ, SISKIYOU, AND SONOMA COUNTIES
AND REQUIRED
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INTRODUCTION

The proposed 2002 Fishery Restoration Grants Program, formally known as "The 2002 Fishery Restoration Grants Program in Del Norte, Humboldt, Lake, Mendocino, San Mateo, Santa Cruz, Siskiyou, and Sonoma Counties" (Restoration Program), is a "project" subject to review under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The Restoration Program involves funding, in whole or in part, of 52 habitat restoration action items in the eight identified counties. These action items, which are set forth in Appendix A, are the principal focus of the environmental analysis set forth below.

The Restoration Program also involves other restoration-related activities, all of which are exempt from CEQA. These other activities fall into two distinct categories. The first category includes 52 action items for which there is no prospect of direct or indirect physical changes to the existing environment. These activities, in particular, involve the award of grants for watershed evaluation, assessment, planning, technical training, and public education. (See generally *Id.,* § 21102; Cal. Code Regs., title 14, § 15262.) Each of these action items are identified in Appendix A.

The second category of Restoration Program action items not discussed in detail in the environmental analysis that follows involve small-scale salmonid habitat improvement projects implemented solely with hand labor. These 6 minor action items, all of which identified in Appendix A, have no potential to adversely affect existing environmental conditions. The actions, in turn, fall within a class of activities that are exempt from CEQA pursuant to a finding by the Secretary of the Resources Agency that the activities pose no risk of potentially significant environmental impacts. (Pub. Resources Code, § 21084; Cal. Code Regs., title 14, §§ 15300, 15306,15307.) These individual action items are also identified in Appendix A.

This initial study and the proposed mitigated negative declaration (MND) analyze the environmental impacts that might result from implementation of the proposed

Restoration Program. The initial study and MND also serve to address potential environmental impacts that may occur to the extent an individual restoration activity requires a Streambed Alteration Agreement (SM) from the Department. (See Fish and Game Code, § 1600 et seq.) Finally, construction of all or a portion of some of the individual restoration activities may actually occur in subsequent years, depending on the terms and contract for each respective individual grant provided by the Department.

PROJECT GOAL AND OBJECTIVES

The primary goal of this restoration program is to maintain and restore natural watershed processes that create habitat characteristics favorable to salmonids.

The objectives of the restoration program action items are to enhance the capability of streams to produce wild anadromous salmonids by maintaining, restoring, and improving stream habitat essential to salmonid production.

Finally, it is the Department's objective to implement this project while not causing a significant adverse effect on the environment, or reducing the number or restricting the range of an endangered, rare or threatened species.

BACKGROUND

The Department may grant funds for habitat restoration to public and private entities, nonprofit organizations, and Indian tribes. Sections 1501 and 1501.5 of the Fish and Game Code pertain to activities funded by the Department.

This restoration program was established in 1981 and is administered by the Department. This program was initiated because of the precipitous drop in the population of fish in coastal streams, mainly salmon and steelhead. This program was developed as a mechanism to administer grant funds designated for the restoration of fish populations. Through the past several decades to the present time, funds allocated by the California Legislature have been used in this grant program in an effort to rebuild fish populations (see Fish and Game Code Section 6900 et seq.). Initially, grants were awarded in three categories: stream restoration, fish rearing, and education. **In** recent years, a more holistic watershed restoration approach has been emphasized that allows restoration throughout the watershed.

There are many factors responsible for the decline of California coastal salmon and steelhead stocks. One important factor is the degradation of stream habitats. Activities in watersheds including logging, mining, road building, livestock grazing, water diversions, and dam construction have seriously impacted the ability of fish to survive and reproduce. For example, excessive fine-sediment has reduced egg and fry survival, removal of riparian vegetation has contributed to increased water

temperatures, habitat has been impaired by water diversions, and culverts and dams have blocked fish passage. Habitat destruction has been instrumental in drastically reduced native anadromous fish populations. Natural events such as wildfire, drought, and floods have also exacerbated these problems. This has caused extreme financial hardship to a once thriving commercial fishery and drastically reduced, o~ in some cases eliminated, a very popular sport fishery. Several stocks have been reduced to the point where listing under the Federal and State Endangered Species Acts has become necessary.

The Restoration Program was instituted as the critical need to restore salmon, and steel head stream habitat was recognized. Guided by the California Salmonid Stream Habitat Restoration Manual (Flosi et al.,1998), hundreds of habitat restoration actions in this Restoration Program have been completed by government agencies and nonprofit groups. Activities have included revegetation with livestock exclosure fencing, riparian planting, barrier removal, bank stabilization and other bank protection structures, and decommissioning of roads and improving drainage systems on existing roads. Instream structures such as boulder clusters, wing deflectors, and log cover have also been used. Culverts that have impeded fish migration have been replaced with bridges or culverts with natural stream bottoms allowing fish access to additional stream reaches. Finally, other watershed improvement activities include: construction of tailwater recovery systems to improve water quality, installation of fish screens to prevent entrainment of juvenile salmon and steel head, and ditch lining and piping to reduce diversions and increase instream flows. These actions create spawning and nursery habitat, provide escape cover and prevent fine sediments from entering streams. Project monitoring has shown significant habitat improvements in streams where this work has taken place. A gradual rebuilding of salmon and steelhead populations is expected as this program continues.

PROJECT LOCATION

Activities performed in the Restoration Program typically occur in watersheds that have been subjected to significant levels of logging, road building, mining, grazing, and other activities that have reduced the quality and quantity of stream habitat available for native anadromous fish.

Coastal watersheds previously dominated by mature redwood and Douglas fir forest, contain extensive road and skid trail systems from tractor logging. These previous mature, forested areas can now be found in various seral stages of vegetative recovery and are predominate in the coastal Restoration Program region. Action items are implemented within the stream course to improve fish habitat. Upslope restoration actions improve fish habitat by reducing the input of fine sediment to the stream. environment.

Inland locations are usually in watersheds dominated by pine and fir forests, often with steep unstable terrain; some inland locations are in valley areas in agricultural use. Most restoration activities are intended to reduce sediment delivery to streams, and provide spawning and rearing habitat in the streams. Streams flowing through valley areas will be treated to stabilize streambanks and increase riparian vegetation.

SCHEDULE

The activities carried out in the Restoration Program typically occur during the annual period of dry weather. Stream work is normally confined to the period of July 1 to November 1 (or the first significant fall rainfall). This is to take advantage of low stream flows and is outside the spawning and egg/alevin incubation period of salmon and steelhead.

Generally, upslope work occurs during the same approximate period. Road decommissioning and other sediment reduction activities are dependent on soil moisture content. Equipment access on dirt roads, and the ability of equipment to move soil, is inhibited by wet conditions. The scheduling of upslope work may also be impacted by the avoidance of nesting or breeding seasons of birds and terrestrial animals.

Some activities may continue after November 1, but only where no impact, or less than significant impacts, will result. This will primarily involve hand-planting of tree seedlings, which typically does not begin until December 1, and may continue until the end of March. Planting during the wet season is necessary to ensure the best survival of seedlings.

PROJECT DESCRIPTION

The Department releases a request for proposals (RFP) on an annual basis for the Restoration Program .that solicits proposals for fishery restoration, conservation education, and watershed assessment and planning work throughout California. Following initial review, proposals are sent to appropriate fishery staff for field review, comment, and scoring, using standardized evaluation criteria. The evaluation process requires consideration of benefits to the fishery resources, need for work in particular drainages or sites, benefit for targeted species, project costs, and positive or negative impacts to the environment. Proposals are then evaluated and prioritized by a DepartmE}nt advisory committee. Contracts are written for the approved action items and environmental documents are completed.

In 1997, the Department received Permit #22323N (see Attachment #1) from the San Francisco District of the U. S. Army Corps of Engineers (USACE) to conduct fish habitat improvement activities using methods described in the California Salmonid

Stream Habitat Restoration Manual (Flosi et a11994, 1998). This permit allows the Department, contractors, and other individuals and groups to conduct fishery habitat restoration activities that have been evaluated by Department biologists. The NMFS issued a non-jeopardy biological opinion, with a follow-up road decommission and culvert replacement addendum (see Attachment #2), that addressed the impacts of the Department's Restoration Program. Permit #22323N is presently valid through July 24, 2002. On March 11, 2002 the Department applied for a new regional general permit from both the San Francisco and Los Angeles districts of the USACE to conduct fish habitat improvement activities using methods described in the updated California Salmonid Stream Habitat Restoration Manual (Flosi et al. in preparation). On April 2, 2002 the Department also applied to the San Francisco District for an 18-month extension of Permit #22323N, pending issuance of a new or re-authorized regional general permit. If an extension is not granted, then contractors implementing action items requiring USACE Section 404 certification will be responsible for obtaining separate approvals for each action item. Most restoration action items needing USACE approval may qualify under Nationwide Permits #3 (Maintenance), #13 (Bank Stabilization), #14 (Linear Transportation), or #27 (Stream and Wetland Restoration Activities). The Section 401 Certification required by the Regional Water Quality Control Board is obtained annually by providing that agency with a description of project work and methods to prevent impacts on water quality.

The Department's lake and stream alteration agreement process (Fish and Game Code Section 1600 et seq.) is an integral part of stream restoration planning and implementation. An agreement is developed for each action item which defines require measures to minimize disturbance to the stream environment. Procedures to accomplish this task are contained in "A Field Guide to Stream and Lake Alteration Agreements" (Department of Fish and Game, Environmental Services Division, 1994). Activities such as installing culverts to provide fish passage, operating equipment in or near streams, and installing bank stabilizing structures are all discussed in the context of minimizing impacts.

All features of this project requiring CEQA review are being provided in sufficient detail to facilitate public review and clearly define the environmental evaluation. In order to achieve this goal, the Restoration Program action items are considered to fall into three categories corresponding to similar activities and requirements for CEQA review. These three action items are as follows:

Public Involvement, Planning, Research, Monitoring, Education and Habitat Acquisition Action Items

Action items in this category will include watershed evaluation, assessment, planning, technical training, public education, and habitat acquisition projects. The names of 52 action items in this category are presented in a list in Appendix A, Table A1. These action items all qualify as either statutory or categorical exemptions under

CEQA Guidelines sections 15262 (Feasibility and Planning Studies), 15306 (Information Collection), 15313 (Acquisition of Lands for Wildlife Conservation Purposes), and 15322 (Educational or Training Programs Involving No Physical Changes). These action items have no potential to change any physical conditions including land, air, water, minerals, plants, animals, ambient noise, historic sites, or aesthetics. Based upon these facts, these types of action items will not be discussed further in this document.

Restoration Element - Minor Action Items

Action items under this category only include small stream habitat restoration activities that improve spawning and rearing habitat for salmon and steelhead trout, without impacting other species. The names of 6 action items in this category are presented in a list in Appendix A, Table A-2. The designs of the action item have been reviewed by the Department and will be implemented by the California Conservation Corps (CCC) and other hand labor crews. These crews and their crew supervisors are trained by Department personnel on life cycle and habitat needs of salmon and steelhead trout. The crews and their supervisors also attend workshops and technical training on salmonid stream habitat restoration techniques. Department personnel closely supervise all stream restoration actions implemented under this restoration element. Department personnel inspect each action item site for compliance at least once before work begins, once during implementation, and once at the end of a restoration activity.

The stream habitat restoration actions include: installation of digger logs, spiderlogs, boulder or log weirs, and boulder or log wing deflectors. Stream bank stabilization may include the use of boulder and cobble armoring of eroding banks, log cribbing, willow mattresses, or willow siltation baffles. Revegetation of riparian habitat normally involves the use of willow sprigs or willow or alder seedlings or transplants. Indigenous stocks (when available) will be used for all planting projects. Several of the action items will only involve maintenance of existing instream structures. The techniques that will be used for these action items have proven successful on many north coast streams and are detailed in the current version of the California Salmonid Stream Habitat Restoration Manual. This manual describes in detail how the work will be performed in the field.

Heavy equipment will not be used for any of the actions listed under this category. CCC and other labor crews will be utilized to implement the proposed actions. Disturbance of the streambanks will be kept to an absolute minimum. All work will be done with hand tools and riparian vegetation will not be removed. No roads will be constructed to complete action items. All sites are accessible by existing dirt or gravel roads or established trails. Access to restoration activity sites has been identified and will not create bank erosion or cause the removal of riparian trees. Staging areas at the activity sites will be set up on dry streambanks where there will be

a minimum, and less than significant, impact to vegetation. Disturbed or bare mineral soils resulting from work activities, which are subject to surface erosion, will be seeded and straw mulched.

These activities are normally classified as categorically exempt according to CEQA Guidelines Sections 15301, Class 1 (i), and Section 15304, Class 4(d). Because these types of action items have no potential for causing significant negative impacts they will not be discussed further in this document.

Restoration Element - Maior Action Items

There is a notable difference in the level of activity found under this category. A description of each action item (52 total) in this element is located in Appendix A. Complete site plans and prescriptions for action items located in Del Norte, Humboldt, Siskiyou, and portions of Mendocino counties are available for review at the Department of Fish and Game, Northern California-North Coast Region, office of Senior Fish Habitat Supervisor, Phil Warner, 601 Locust Street, Redding, California 96001. Appointments may be made by telephoning (530) 225-2307, Monday through Friday, between the hours of 8 a.m. and 5 p.m.

Complete site plans and prescriptions for action items located in Lake, San Mateo, Santa Cruz, Sonoma and portions of Mendocino counties, are available for review at the Department of Fish and Game, Central Coast Region, office of Environmental Scientist, Gene Geary, 7329 Silverado Trail, Yountville, California 94559. Appointments may be made by telephoning (707) 944-5573, Monday through Friday, between the hours of 8 a.m. and 5 p.m.

These items require larger size material and increased volumes to be moved by heavy equipment and, in so, doing involve certain limited construction activities. This category uses many of the same instream habitat restoration techniques discussed in the previous element. In addition, upslope earthmoving and culvert replacement activities are also included.

Typically, these stream habitat restoration activities use dump trucks to deliver logs, root wads, or quarry rock to staging areas, and front-end loaders to deliver material to restoration sites. Existing stream crossings will be used to access the stream in most cases. If stream crossings do not exist, the least damaging access point will be selected based upon the size, type, and density of riparian vegetation. Where use of such access points is necessary, riparian vegetation can be affected, particularly the upper part of plants may be damaged, with the roots and lower parts receiving minimal damage. Plants damaged in this way will usually re-sprout and recover.

Hydraulic excavators or backhoes may be used to excavate trenches or keyways in streambanks to anchor logs or boulder structures. Excavators are used to place materials, construct instream structures, and stabilize streambanks with boulders and logs. Willow cuttings are usually placed into the keyway trenches around the logs or boulders and then the trench is backfilled with cobble and native soil. This procedure anchors the structure into the stream bank, accelerates the establishment of willows around the structure, and prevents the stream from scouring around the newly placed structure.

Some major action items will stabilize stream banks or small stream-side landslides. These action items will armor and buttress the landslide or stream bank using boulders, logs, root wads, and loose rock revetment. Revetments are designed with logs, root wads, and boulders that project into the stream to provide instream cover and velocity breaks for salmonids. Smooth riprap, however, which accelerates water velocities along the stream bank, is not permitted under this program. When practical, the bank will be sloped back to a minimum 1.5 to 1 slope. A toe trench will be excavated at the toe of the landslide or eroding bank. The excavated trench will be backfilled with boulders at least three feet in diameter and will extend up to the highwater mark. Rock from the toe trench, up to the high-water mark, will be of a size that will withstand normal high flows. Revetment will extend upstream and downstream of the unstable reach and will be keyed into the stable banks.

Runoff from above the slide or eroding banks will be diverted away from the area being stabilized. The slide face will be revegetated using indigenous plants. Willow cuttings will be placed in the toe trenches. Browse protectors will be used on seedlings to prevent predation by browsing animals.

All work, except for the revegetation, will take place during the summer and fall (low flow period) and shall be completed before the first significant seasonal rainfall. Planting of seedlings will take place after December 1, or when sufficient rainfall has occurred, to ensure the best chance of survival of the seedlings, but in no case later than April 1. All habitat improvements will be done in accordance with techniques described in the California Salmonid Stream Habitat Restoration Manual.

Upslope action items in this section will upgrade or decommission roads by implementing all or part of the following tasks: road ripping or decompacting; installing or maintaining rolling dips (critical dips); installing or maintaining waterbars and crossroad drains; replacing, maintaining or cleaning culverts; outsloping roadbeds; revegetating work sites; and excavating stream crossings with spoils stored on site or end-hauled.

Sites which are expected to erode and deliver sediment to the stream are the only locations where work will be authorized under this category. Work will not be authorized to improve aesthetic values only.

Removal of road and skid trails will include retrieving unstable material sidecast during original road construction and excavation of stream crossings and other watercourse fill. Stream crossings will be excavated to original width, depth, and slope to expose natural channel morphology and armor. Side slopes will generally match original contours above and below the road. Culverts that are replaced in fish bearing reaches of streams will be done in a manner to allow for unimpeded upstream and downstream fish passage.

When fill material is placed on road benches for permanent storage, the road bench will be ripped or decompacted first. The fill will then be placed against the cutbank and shaped to blend with the surrounding topography that existed prior to road construction. Outsloping of the roadbed will occur as needed, to reduce potential sediment delivery to the stream where there is insufficient fill available to recontour the site, or where there is evidence that the overall long-term stability of the site does not justify a full recontour treatment. Where practical, fill will be compacted to the top of the filled cut to reduce the potential for seismically induced landsliding. Spoil material will be stored in stable locations where it will not erode. If stable spoils storage sites are not available within the project area, they will be end-hauled to a stable storage site outside of the project area. Areas chosen for this purpose will be devoid of tree and shrub vegetation. Upon completion of each site, woody debris will be scattered over the surface of the restored area as mulch.

Road crossing removal may involve some removal of vegetation that has grown in sediment that has been deposited upslope of road prisms. Most of this vegetation will be used as coarse wood mulch on bare soils to reduce surface erosion. Some of the material will be transplanted on-site as one component of the restoration action items. In all cases, disruption of existing vegetation will be minimized.

Culvert replacement requires diverting streamflow around the project site and excavating the existing culvert with heavy equipment. Normally concrete footings are constructed to support a new bottomless culvert or bridge. If appropriate, grade control structures are incorporated into the project area to prevent excessive down-cutting of the stream. All work concerning culvert replacement will be consistent with current Department and NMFS criteria concerning fish passage. Current NMFS fish passage criteria can be found on the web at: http://swr.nmfs.noaa.gov.

Tailwater recovery systems are constructed by creating off-stream catchment ponds in pastures adjacent to existing irrigation system discharges. Irrigation tailwater that would enter streams is trapped in these catchment ponds and pumped back to the head of the irrigation system. This prevents warm, nutrient rich water from entering streams. It also reduces the amount of water needed for irrigation purposes.

Fish screens are constructed within existing irrigation diversions to prevent entrainment of juvenile salmon and steelhead. Fish screens are composed of a concrete foundation and walls. A steel framework supports perforated screen panels with a mechanical cleaning system. A bypass carries the fish back to the stream.

Ditch lining and piping is used to reduce loss of water in existing irrigation delivery systems. Many agricultural diversions from salmon and steel head streams use dirt lined ditches that lose a high percentage of water from the point of diversion to the point of use. Water saved by these projects must be left in the stream for fish benefits.

Appendix A contains a list of major action *item* titles, locations, and descriptions of work that will be implemented at each site. The action item designs are reviewed by the Department and are implemented by contractors utilizing heavy equipment and some hand labor crews. During a pre-project inspection, the contractor and the Department will tour the entire activity area and identify the sites and techniques necessary to carry out the recommendations. The site-specific recommendations will be listed in an inspection report which will be acknowledged by the contractor's signature, as a required element of the activity. The Department will continue to inspect the work site during and after completion of the action item. All road upgrading or decommissioning will be done in accordance with techniques described in the Handbook for Forest and Ranch Roads (Weaver and Hagans, 1994) or other similar protocols. A copy of Handbook for Forest and Ranch Roads may be obtained from the Mendocino County Resource Conservation District, 405 Orchard Avenue, Ukiah, CA 95482 (call (707) 468-9223 for current price). All culvert replacement projects shall be done in accordance with techniques and criteria consistent with current Department and NMFS guidelines concerning fish passage. Implementation of each major action item will be conditioned and controlled to prevent any potentially significant impacts under CEQA.

Environmental Assessment Of Each Maior Action Item

Each action item is assigned to the appropriate category using the established criteria for each category. The work to be completed for each action item is carefully evaluated to make this determination. Once this evaluation process is completed, the action items described under the Restoration Element - Major Action Items section, are subjected to a systematic environmental analysis. This analysis ultimately prescribes site-specific conditions which must be applied in order to avoid potentially significant negative effects on the environment, including such effects on endangered, rare, or threatened species and their habitat.

First, all major action items listed in Appendix A will comply with Department policies to conduct archaeological and rare plant surveys. A qualified archaeologist(s) will be contracted to complete the surveys using standard protocols. Rare plant surveys will be conducted following the Guidelines for Assessing the Effects of Proposed

Developments on Rare and Endangered Plants and Plant Communities (Department of Fish and Game, 2000). A review of the Department's Natural Diversity Data Base (NDDB) for each project located in the entire eight-county programmatic project area is attached to the statement of work for each major action item listed in Appendix A and indicates which plant species found on a State or Federal special status list that could potentially be affected at the work sites. Archaeology and rare plant surveys will be completed prior to any ground disturbing activities. If any potentially significant impact cannot'be avoided, the action item will not be implemented. Any site specific recommendations made by a Department biologist, or other qualified biological consultant, to avoid any potentially significant impacts shall become part of the work plan. The Department will ensure that the contractor or responsible party is aware of, and implements, these site specific conditions. Also, the Department will inspect the work site before, during, and after completion of the action item. Any violation of the specific recommendations will be immediately rectified. Failure, or inability, to rectify a particular recommendation will cause all work to cease until a remediation plan is developed that avoids the potentially significant impact.

Next, a review of the Department's NDDB for the entire eight-county project location indicated which animal species found on a State or Federal special status list may be present at the work sites. This site specific information is also attached to each statement of work in Appendix A. Mitigation measures to avoid impacts to these species are presented along with other mitigation measures in Appendix B, Mitigation Measures, Monitoring and Reporting Program. In the absence of site-specific information, species identified as having potential to be affected at a work site will be presumed to be present and mitigation measures to avoid impact to that species will be implemented. Any site-specific surveys to confirm the presence, or absence, of a species at a work site will follow the Guidelines for Conducting Project Specific Endangered, Rare, and Threatened Species Surveys (Appendix C). Streambed Alteration Agreements and contracts for each site will be conditioned to avoid impacts to any special status species that could potentially be affected at that site. The Department will ensure that the contractor or responsible party is aware of all specific conditions that apply to their work site. Also, the Department will inspect the work site before, during, and after completion of the action item to ensure compliance with mitigation measures to avoid potential impacts to endangered, rare, or threatened species. Any violation of the specific recommendations will be immediately rectified. Failure or inability to rectify a particular recommendation will cause all work to cease at that site until a remediation plan is developed.

Through careful design, scheduling, and monitoring, any and all potentially significant impacts associated with the major action items will be avoided or mitigated to below a level of significance under CEQA. Additional details regarding implementation of major action items, including required mitigation measures, are detailed in the environmental checklist section below.

Monitoring

Project monitoring is considered an important element in the activity development and implementation process. The monitoring process provides performance control during the activity and also provides a measure of the benefits, insight, and guidance for future projects.

Activity monitoring during implementation is geared to ensure that all regulatory environmental issues are strictly addressed including air, water, and avoiding impacts to sensitive plant and animal species. During implementation, activities are carefully monitored to make sure plans are followed by using the correct materials and techniques so that the objectives of the activities are met while still protecting the environment.

Post-activity monitoring begins with information collected immediately after the activity is completed. This information includes documenting the exact location where the activity has occurred with reference points and survey marks. "As-built" descriptions with design drawings and photographs (both before and after the activity) are collected. A complete activity description including the objectives of the activity must be retained.

The next phase of post-activity monitoring should occur within one to three years after an action item is complete. The Department will randomly select ten percent of the action items within each project type for evaluation. This evaluation shall be recorded on standard habitat evaluation forms developed by California Department of Fish Game using procedures developed by the Department and described in the California Salmonid Stream Habitat Restoration Manual, Part VIII, Project Monitoring and Evaluation. Physical features associated with an activity are generally more easily measured and interpreted. Biological data, especially anadromous fish data, is more difficult to collect and interpret. Reliable analysis of anadromous salmonid population response to habitat improvement prescriptions generally require many years of trend data.

Complete monitoring specifications are included in the California Salmonid Stream Habitat Restoration Manual including survey protocols and data interpretation. Additional details on monitoring and reporting requirements are presented in Appendix B.

REFERENCES:

California Department of Fish and Game. 1994. A Field Guide to Stream and Lake Alteration Agreements. Environmental Services Division. Calif. Fish Game.

California Department of Fish and Game. 1997. Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities. Environmental Services Division. Calif. Fish Game.

Flosi, G, S. and F. Reynolds. 1994. California Salmonid Stream Habitat Restoration Manual. Second Edition. Calif. Fish and Game.

Flosi, G, S. Downie, J. Hopelain, M. Bird, R. Coey, and B. Collins. 1998. California Salmonid Stream Habitat Restoration Manual. Third Edition. Calif. Fish and Game. The most current version of the manual is available at: http://www.dfg.ca.gov/habitats. A hard copy of the manual may be requested from the California Department of Fish and Game, Native Anadromous Fish and Watershed Branch, attn. Habitat Restoration Coordinator, 1807 13th St., Suite 104 Sacramento, CA 95814.

Flosi, G, S. Downie, M. Bird, R. Coey, and B. Collins. In Preparation. California Salmonid Stream Habitat Restoration Manual. Fourth Edition. Calif. Fish and Game. The most current version of the manual is available at: http://www.dfg.ca.gov/habitats. A hard copy of the manual may be requested from the California Department of Fish and Game, Native Anadromous Fish and Watershed Branch, attn. Habitat Restoration Coordinator, 1807 13th St., Suite 104 Sacramento, CA 95814.

Hagans and Weaver. 1994. Handbook for Forest and Ranch Roads. 161 p. Prepared by William E. Weaver, Ph.D. and Danny K. Hagans, Pacific Watershed Associates for the Mendocino County Resource Conservation District, 405 Orchard Ave., Ukiah, CA 95482.

ENVIRONMENTAL CHECKLIST FORM

1. Project Title: The 2002 Fisherv Restoration Grants Proqram in Del Norte. Humboldt. Lake. Mendocino. San Mateo. Santa Cruz. Siskiyou and Sonoma Counties

2. Lead Agency Name and Address:

California Department of Fish and Game
Northern California-North Coast Region 601
Locust Street
Redding, CA 96001

California Department of Fish and Game
Central Coast Region
Post Office Box 47
Yountville, CA 94599

3. Contact Person and Phone Number:

Northern California-North Coast Region Phil Warner
(530) *225-2307*

Central Coast Region
Gene Geary
(707) 944-5573

4. Project Location: Various sites in Del Norte, Humboldt, Lake, Mendocino, San Mateo, Santa Cruz, Siskiyou, and Sonoma counties (Appendix A).

5. Project Sponsor's Name and Address:

California Department of Fish and Game
Northern California-North Coast Region 601
Locust Street
Redding, CA 96001

California Department of Fish and Game
Central Coast Region
Post Office Box 47
Yountville, CA 94599

6. General Plan Designation: Various

7. Zoning: Various

8. Description of Project Implementation of 53 major action items for restoration of anadromous salmonid habitat (Appendix A). These action items include measures to improve anadromous fish passage, reduce erosion and sedimentation, enhance instream habitat, improve water quality and improve juvenile survival.

9. Surrounding Land Uses and Setting: Briefly describe the project's surroundings: Primarily forest lands used for timber production. Some action items will be located in agricultural lands.

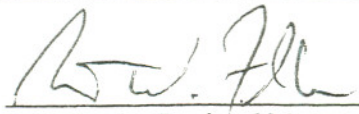
10. Other Public Agencies Whose Approval Is Required: U.S Army Corps of Engineers, North Coast Regional Water Quality Control Board

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

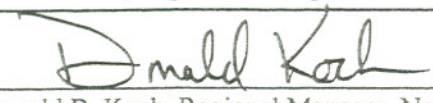
	Aesthetics		Agriculture Resources		Air Quality
	Biological Resources		Cultural Resources		Geology /Soils
	Hazards & Hazardous Materials		Hydrology / Water Quality		Land Use / Planning
	Mineral Resources		Noise		Population / Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities / Service Systems		Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)
On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a A potentially significant impact@ or A potentially significant unless mitigated@ impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Rob Floerke, Regional Manager, Central Coast Region — Date: 5/16/02



Donald B. Koch, Regional Manager, Northern California-North Coast Region — Date: 5/15/02

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
1. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				X
c) Substantially degrade the existing visual character or quality of the site and its surroundings?				X
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				X
See attached explanations.				
II. AGRICUL TURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
See attached explanations.				

III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantialJy to an existing or projected air quality violation?			X	
c) Result in a cumulatively considerable net increase of any criteria polJutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?				X
e) Create objectionable odors affecting a substantial number of people?				X
See attached explanations.				

IV. BIOLOGICAL RESOURCES - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?				X

IV. BIOLOGICAL RESOURCES (continued):				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, fiIling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?				X
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
See attached explanations.				
V. CULTURAL RESOURCES - Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X
See attached explanations.				

VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, inc1uding the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?				X
iii) Seismic-related ground failure, including liquefaction?				X
iv) Landslides?				X
b) Result in substantial soil erosion or the loss oftopsoil?				X
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18- I -B of the Uniform Building Code (1994), creating substantial risks to life or property?				X
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
See attached explanations.				

VII. HAZARDS AND HAZARDOUS MA TERlALS B Would the project:				
- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	
See attached explanations.				

VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				X
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?				X
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff'?				X
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a tOO-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?				X
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X
See attached explanations.				

IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				X
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
See attached explanations.				
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
See attached explanations.				
XI. NOISE B Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundbome vibration or groundbome noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		X		

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
See attached explanations.				
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
See attached explanations.				
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	
See attached explanations.				

XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
See attached explanations.				
XV. TRANSPORTATIONfTRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (Le., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?				X
1) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
See attached explanations.				

XVI. UTILITIES AND SERVICE SYSTEMS Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new stonn water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a detennination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project=s projected demand in addition to the provider=s existing commitments?				X
f) Be served by a landfill with sufficient pennitted capacity to accommodate the project=s solid waste disposal needs?				X
g) Comply with federal, state, and local statutes and regulations related to solid waste?				X
See attached explanations.				

XVII. MANDA TORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				X
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?				X
See attached explanations.				

EXPLANATION OF RESPONSES TO INITIAL
STUDY ENVIRONMENTAL CHECKLIST

I. AESTHETICS

a) The project will not have an adverse effect on a scenic vista. Such an impact will not occur because the project will stabilize, restore, and revegetate damaged and eroded sites to produce a more natural and esthetically pleasing appearance.

b) The project will not damage scenic resources such as trees, rock outcroppings, and historic buildings. Such an impact will not occur because the project will not disturb large trees or other scenic features in the process of restoring damaged sites.

c) The project will not substantially degrade the existing visual character or quality of the work sites and their surroundings. Such an impact will not occur because in most cases the restoration project will restore the natural character of disturbed sites. Where non-natural structures (such as fish screens) are constructed, they will be of small size and compatible with the appearance of with their surroundings.

d) The project will not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area of the worksites. Such an impact will not occur because none of the restoration project action items require installation of artificial lighting.

II. AGRICULTURE RESOURCES

a) The project will not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. Such an impact will not occur because most project worksites are located away from FMMP designated farmland. Project actions associated with farmland (such as fish screens) are designed to allow continued use of farmland with reduced impacts to anadromous salmonids.

b) The project will not conflict with existing zoning for agricultural use or a Williamson Act contract. Fish habitat restoration actions will not change existing land use.

c) The project will not involve other changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use. Fish habitat restoration actions are either away from, or are compatible with, existing agricultural uses.

III. AIR QUALITY

a) The project will not conflict with or obstruct implementation of the applicable air quality plan. Such an impact will not occur because implementation of the project does not create any features that would be a source of air pollution. Use of vehicles and heavy equipment during construction will be on a limited scope and a short duration and is not expected to adversely affect air quality.

b) The project will not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Such an impact will not occur because of the limited scope of construction activities and the fact that work sites are located in rural areas that are in overall attainment of air quality standards.

c) The project will not result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors). Such an impact will not occur because the project involves no ongoing sources of air pollution.

d) The project will not expose sensitive receptors to substantial pollutant concentrations. Such an impact will not occur because the project will not significantly increase pollutant concentrations.

e) The project will not create objectionable odors affecting a su bstantial nu mber of people. Project actions are designed to restore natural habitat conditions for salmonids, and will not create any stagnant water that might produce objectionable odors.

IV. BIOLOGICAL RESOURCES

a) The project will not have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service. Such an impact will not occur because project activities are designed to improve and restore stream habitat, to provide a long-term benefit to both anadromous salmonids and other fish and wildlife. The project will be implemented in a manner that will avoid short-term adverse impacts to rare plants and animals and cultural resources during construction; the mitigation measures that will be implemented to avoid short-term impacts to rare plants and animals and cultural resources are described in Appendix B, Mitigation Measures, Monitoring and Reporting Program. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

b) The project will not have a substantial adverse effect on any riparian habitat or other sensitive natural communities identified in local or regional plans, policies and regulations, or by the California Department of Fish and Game or U. S. Fish and Wildlife Service. Such an impact will not occur because the project actions are designed to correct past habitat degradation and restore and enhance riparian habitat and associated upland habitats.

c) The project will not have a substantial adverse effect on Federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. The project actions will have either no effect on wetlands or will be beneficial to wetlands.

d) The project will not substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. The project will enhance the movement of anadromous fish by the replacement or removal of culverts and bridges that are barriers to fish migration.

e) The project will not conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Such an impact will not occur because project actions are designed to restore and enhance biological resources. Some minor disturbance of grasses and shrubs will occur where stream structures are keyed into the streambanks. Care will be taken not to disturb any mature trees. Riparian vegetation will be reestablished where construction activities disturb existing plants, and additional native plants will be planted to enhance the riparian vegetation.

f) The project will not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan. Such a conflict will not occur because the project restoration actions will not have a significant adverse impact on any species or habitat. Project actions are designed to restore the natural character of the fish and wildlife habitat at the project work sites. The project specifically supports the California Salmon, Steelhead Trout and Anadromous Fisheries Program Act (Fish and Game Code Section 6900 et. seq.)

V.CULTURALRESOURCES

a) The project will not cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5. While ground disturbance will be required to implement the project at some work sites that have the potential to affect historical resources, this potential impact will be avoided through implementation of the protective measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program.

Resources identified during site-specific surveys will be protected before ground-disturbing activities are permitted at a site. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

b) The project will not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. While ground disturbance will be required to implement the project at some work sites that have the potential to affect archaeological resources, this potential impact will be avoided through implementation of the protective measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program. Resources identified during site-specific surveys will be protected before ground-disturbing activities are permitted at a site. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

c) The project will not directly or indirectly destroy any unique paleontological resources or sites, or unique geologic features. While ground disturbance to implement the project at some work sites has the potential to affect these resources, this potential impact will be avoided through implementation of the protective measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program. Resources identified during site-specific surveys will be protected before ground-disturbing activities are permitted at a site. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

d) The project will not disturb any human remains, including those interred outside of formal cemeteries. While ground disturbance will be required to implement the project at some work sites that have the potential to affect these resources, this potential impact will be avoided through implementation of the protective measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program. Resources identified during site-specific surveys will be protected before ground-disturbing activities are permitted at a site; As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

VI. GEOLOGY AND SOILS

a i) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area, or based on other substantial evidence of a known fault. Such an impact will not occur because the project does not create any structures for human habitation.

a ii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking. Such an impact will not occur because the project does not create any structures for human habitation.

a iii) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction. Such an impact will not occur because the project does not create any structures for human habitation.

a iv) The project will not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides. Such an impact will not occur because the project does not create any structures for human habitation.

b) The project will not result in substantial soil erosion or the loss of topsoil. Such an impact will not occur because implementation of the restoration project is designed to contribute to an overall reduction in erosion and sedimentation. Existing roads will be used to access work sites. Ground disturbance at most work sites will be minimal, except for road improvements or decommissioning. Road improvements and decommissioning will involve moving large quantities of soil from road fills and stream crossings to restore historic land surface profiles and prevent chronic erosion and sediment delivery to streams. The potential for substantial soil loss associated with road improvement and decommissioning will be avoided through implementation of the mitigation measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

c) Some project worksites are on unstable soils; however, the project will not increase the risk of landslides, lateral spreading, subsidence, liquefaction, or collapse. The project actions are designed to stabilize conditions at these sites in order to reduce sediment delivery to salmonid habitat. Actions implemented to stabilize sites may not be successful in all cases, but site instability will not be increased when compared to existing conditions.

d) Some project work sites will be located on expansive soil; however, the project will not create substantial risks to life or property. Such an impact will not occur because the project will create no habitations, and the majority of the restoration actions will not create rigid structures that could be damaged by expansive soils. The few rigid structures to be created by the project (such as fish screens) will be engineered to withstand expansive soils, if they are present.

e) The project will not create any sources of waste water requiring a septic system.

VII. HAZARDS AND HAZARDOUS MATERIALS

a) The project will not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Any potential significant hazard associated with the accidental release of coolant and petroleum products used with equipment during construction will be avoided through implementation of the mitigation measures presented in Appendix S, Mitigation Measures, Monitoring and Reporting Program. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

b) The project will not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. At work sites requiring the use of heavy equipment, there is a small risk of an accident upsetting the machine and releasing fuel, oil, and coolant. The potential for accidental release will be reduced to a less than significant level through implementation of the mitigation measures presented in Appendix S, Mitigation Measures, Monitoring and Reporting Program. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

c) The project will not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Such impact is avoided because the project will not create any feature that will emit hazardous substances.

d) The project worksites are not located on any site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5.

e) No project work site is located within an airport land use plan or within two miles of a public airport or public use airport.

f) No project work site is located within the vicinity of a private airstrip.

g) The project will not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan. Except for the case of road decommissioning, the project has no effect on access. The planned decommissioning of selected unused wildland roads will not have a significant impact on emergency vehicle access.

h) The project will not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. At work sites requiring the use of heavy equipment, there is a small risk of an accidental spark from equipment igniting a fire. The potential for accidental fire will be reduced to a less than significant level through implementation of the mitigation measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program. As a result, mitigation measures will ensure that any potentially significant impacts are avoided or mitigated to below a level of significance.

VIII. HYDROLOGY AND WATER QUALITY

a) The project will not violate any water quality standards or waste discharge requirements. There is the potential for minor short-term increase in turbidity during installation of instream structures or culvert removal, however the mitigation measures described in Appendix B Mitigation, Monitoring and Reporting will assure that the project actions are in compliance with water quality standards. As a result, mitigation measures will ensure that any potentially significant short-term impacts are avoided or mitigated to below a level of significance.

b) The project will not substantially deplete groundwater supplies or interfere substantially with groundwater recharge. Upslope restoration activities will return drainage to historic patterns thereby decreasing surface runoff and increasing infiltration to the ground water.

c) The project will not substantially alter the existing drainage pattern of the work sites in a manner that would result in substantial erosion or siltation on- or off-site. Such an impact will not occur because the project actions are designed to produce decreased erosion overall. Instream habitat structures, such as boulder weirs or flow deflectors, will produce local redistribution of sediments. These structures will produce a local redistribution of bedload, facilitating the deposition of spawning gravel in riffles, and improving scour to maintain pools for juvenile fish habitat. This local redistribution of bedload will not produce a net increase of erosion.

d) The project will not substantially alter the existing drainage pattern of the work sites, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site. The project will decrease the risk of flooding through upslope restoration activities that will return drainage to historic patterns, thereby increasing infiltration and decreasing surface runoff.

e) The project will not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or provide substantial additional sources of polluted runoff. Such an impact will not occur because upslope restoration activities will stabilize slopes and return drainage

to historic patterns, thereby decreasing surface runoff and decreasing the silt load delivered to streams in the area of the project.

f) The project will not substantially degrade water quality. During placement of stream habitat structures and culvert replacement, some minor turbidity may be generated. The potential for degradation of water quality will be reduced to a less than significant level through implementation of the mitigation measures presented in Appendix B, Mitigation Measures, Monitoring and Reporting Program. Some short-term minor increase in turbidity may also occur as the streambed around instream structures adjusts during the first high stream flow following activity completion. However, this is not expected to produce a significant increase over background turbidity. As a result, mitigation measures will ensure that any potentially significant short-term impacts to water quality are avoided or mitigated to below a level of significance.

g) The project will not place housing within a 1 OO-year flood hazard area as mapped on any flood hazard delineation map. No housing will be created as part of this project.

h) The project will not place within a 1 OO-year flood hazard area structures which would significantly impede or redirect flood flows. Culvert removal and replacement to be done as part of the project will remove existing impediments to flood flows. Instream habitat structures, such as boulder weirs, deflectors, and bank armor, are built to change the direction and velocity of stream flow. However, these structures are small (sized to affect conditions in the low flow channel) and will not impede flood flows.

i) The project will not expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam. Such an impact will be avoided because all instream structures to be created are small and will not significantly impede flood flows.

j) The project will not expose people orstructures to a significant risk of inundation by seiche, tsunami, or mudflow. Such an impact will not occur because project actions are designed to improve or stabilize conditions at the work sites. Upslope restoration actions will reduce the chance of mudflow by stabilizing disturbed areas, and restoring natural drainage patterns. Project work sites are not located in areas at risk to inundation by seiche or tsunami.

IX. LAND USE AND PLANNING

a) The project will not physically divide an established community. This impact will not occur because no culvert removal or road decommissioning is proposed in any established community.

b) The restoration activities that comprise this project do not conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over

the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Such an impact will not occur because the project's restoration activities are designed to be compatible with local land use plans and ordinances.

c) The project will not conflict with any applicable habitat conservation plans or natural community conservation plans. Such an impact will not occur because project actions are designed to improve aquatic habitat conditions without adversely affecting any other species or their habitats

X. MINERAL RESOURCES

a) The project will not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Such an impact will not occur because project actions are only designed to stabilize and restore habitat and soils within the actions area.

b) The project will not result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. Such an impact will not occur because no mineral resource recovery sites occur at the project work sites.

XI. NOISE

a) The project will not result in exposure of persons to, or generation of noise levels in excess of, standards established in the local general plan or noise ordinance, or applicable standards of other agencies. There may be a minor temporary increase in noise levels at those work sites requiring the use of heavy equipment. While such short-term increase in noise will not produce a significant increase in the noise level in the general environment, there is a potential for equipment noise to affect workers in close proximity to equipment producing noise levels ;:::85 db, such as chainsaws or back-hoes. However, such an impact will not occur because personnel operating noisy equipment will be required to wear hearing protection. As a result, mitigation measures will ensure that any potentially significant noise impacts are avoided or mitigated to below a level of significance.

b) The project will not result in exposure of persons to, or generation of, excessive groundborne vibration or ground borne noise levels. Such an impact will not occur because only minor amounts of groundborne vibration or noise will be generated short-term at those work sites requiring the use of heavy equipment.

c) The project will not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project. Such an impact will not occur because most project structures are passive (Le., contain no moving parts). The only exceptions are the proposed fish screens, which

will contain moving brushes to clean the screens. These brushes are driven by slow speed (10-15 RPM) water wheels and will not substantially increase ambient noise levels where installed.

d) The project will not result in a substantial temporary, or periodic, increase in ambient noise levels in the project vicinity above levels existing without the project. Such an impact will not occur because only minor amounts of noise will be generated temporarily at those work sites requiring the use of heavy equipment. At those sites near nesting or breeding sites for listed species, heavy equipment will only be used outside the sensitive periods for nesting or breeding, as described in Appendix B, Mitigation Measures, Monitoring and Reporting Program. As a result, mitigation measures will ensure that any potentially significant noise impacts are avoided or mitigated to below a level of significance.

e) None of the project work sites are located within two miles of a public airport or public use airport.

f) None of the project work sites are located within the vicinity of a private airstrip.

XII. POPULATION AND HOUSING

a) The project will not induce substantial population growth in an area, either directly or indirectly. Such an impact will not occur because the project will not construct any new homes, businesses, roads, or other human infrastructure.

b) The project will not displace any existing housing and will not necessitate the construction of replacement housing elsewhere.

c) The project will not displace any people and will not necessitate the construction of replacement housing elsewhere.

XIII. PUBLIC SERVICES

a) The project will not have any significant environmental impacts associated with new or physically altered governmental facilities. Issuance of restoration grants to government agencies could, in some cases, lead to minor increases in staffing to complete projects. Such increases will not lead to any significant adverse impacts, because the increases are short term, and no significant construction will be required to accommodate additional staff.

XIV. RECREATION

a) The project would not increase the use of existing neighborhood and regional parks, or other recreational facilities. Such an impact will notoccur because the project actions will restore anadromous fish habitat and do not significantly alter human use or facilities at existing parks or recreational facilities. Overall, the Restoration Program is expected to increase recreation opportunities by assisting in restoring populations of anadromous fish.

b) The project does not include recreational facilities and does not require the construction or expansion of recreational facilities.

xv. TRANSPORTArlON/TRAFFIC

a) The project will not cause a substantial increase of traffic, in relation to the existing traffic load and capacity of the street system. Such an impact will not occur because the project will result in only minor temporary increases in traffic to primarily wildland sites during implementation of habitat improvement measures.

b) The project will not exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways. Such an impact will not occur because the habitat improvement actions will not generate a significant amount of traffic at each individual work site and because the work sites are dispersed throughout the coastal counties.

c) The project will not result in any change in air traffic patterns.

d) The project will not alter roads in any way that will substantially increase hazards to transportation. The proposed project will reduce hazards to transportation, because the proposed project will correct and reduce landslide and erosion damage on the selected rural roads.

e) The project will not result in inadequate emergency access. Such an impact will not occur because during replacement of small road crossings, an alternate route for traffic will be provided around the construction.

f) The project will not significantly affect parking capacity or demand for parking.

g) The project will not conflict with adopted policies, plans, or programs supporting alternative transportation.

XVI. UTILITIES AND SERVICE SYSTEMS

a) The project will not produce wastewater.

b) The project will not require, or result in the construction of, new water or wastewater treatment facilities or expansion of existing facilities. Such an impact will not occur because the project will not produce wastewater.

c) The project will not cause significant adverse environmental effects associated with the construction of new storm water drainage facilities or expansion of existing facilities.

d) The project will have sufficient water supplies available to serve the project from existing entitlements and resources.

e) The project will not produce wastewater.

f) The project will not generate solid waste requiring disposal in a landfill.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

a) The project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Such a potential does not exist because the project will be implemented in a manner that will avoid short-term adverse impacts to rare plants and animals, and cultural resources during construction; the mitigation measures that will be implemented to avoid short-term impacts to rare plants and animals, and cultural resources are described in Appendix B, Mitigation Measures, Monitoring and Reporting Program. The Project activities will provide a long-term benefit to both anadromous salmon ids and other fish and wildlife.

b) The project does not have adverse impacts that are individually limited, but cumulatively considerable. Cumulative adverse impacts will not occur because potential adverse impacts of the project are only minor and temporary in nature. It is the goal of the project that the beneficial effects of habitat enhancement actions will be cumulative over time and contribute to the recovery of listed anadromous salmonids.

c) The project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. The habitat enhancement measures implemented as part of this project will contribute to improved water quality, increased soil stability, and the recovery of listed salmonids, all of which will be beneficial to human beings.

APPENDIX A

ACTION ITEMS PROPOSED FOR FUNDING

Table A-1. Public Involvement, Planning, Research, Monitoring, Education and Habitat Acquisition Action Items

Project Type*	Project Title	Grant Recipient	
AC	AmeriCorps Watershed Stewards Project – Member Match	California Conservation Corps	
ED	Salmon Trout Education Program for the Restoration & Conservation of Steelhead, Coho & Chinook (STEP)	Monterey Bay Salmon & Trout Project	
ED	French Creek Restoration Project	French Creek Outdoor School/Etna elementary School	1
ED ED	Eel River Salmon Restoratin Project Education Coordinator	Eel River Salmon Restoration Project	1
	CCSE Education Programs	Central Coast Salmon Enhancement	1
ED	Creek Days, Eel River Environmental Education Fair	Eel River Watershed Improvement Group	1
ED	Etna Union High School District Watershed Education Program	Siskiyou Resource Conservation District	1
ED	Fisheries & Watersheds Education Project	Jughandle Creek Nature Center	1
MD	Instream Cover Enhancement Monitoring & Evaluation Program-Lower Freshwater Creek	Coastal Steam Restoration	
MD	Mill Creek Restoration Project: Monitoring Component	Mendocino County Water Agency	1
MD	Long-term Coho Salmon & Steelhead Trout Monitoring in Coastal Marin County	Point Reyes National Seashore Association	1
MD	Smith River Stream Habitat Inventory	Siskiyou Research Group	1
MD	Monitoring and Evaluation of Current and historical Physical Habitat Conditions in Klamath River Est	Yurok Tribal Fisheries Program	
OR	Project coordinator for the Southern California Steelhead Coalition	California Trout, Inc.	
OR	Promoting Sound Resource Management Practices and Policies	The Buckeye Conservancy	
OR	FishNet 4C-Fishery Network of the Central California Coastal Counties	FishNet 4C-Marin County	
OR	Russian River Watershed Council Organization Development	Mendocino County Resource Conservation District	1
OR	Matilija Coalition Organizatinal Support	Matilija Coalition	1
OR	Coastal Streams Coordination	Rural Human Service	1
OR	ERWIG Group Support and Assistance Shasta	Eel River Wateshed Improvement Group	1
OR	CRMP Coordinator	Great Northern Corporation	1
OR	Scott River Watershed Council	Siskiyou Resource Conservation District	1
OR	Salmon River Watershed Organization Support		
OR	Smith River Watershed Coordinator	Salmon River Restoration Council	
OR	Tri-County FISH Team	Del Norte County	
OR	Landowner & Community Outreach for Mattole Fisheries Restoration	City of Santa Barbara	
OR	Gualala River Watershed Outreach and Education Program	Mattole Restoration Council	
OR		Sotoyome Resource Conservation District	
R	Five Counties Salmon Conservation Program	Trinity County Planning Dept., Natural Resources Division	

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ED	French Creek Restoration Project	French Creek Outdoor School/Etna elementary School	1
ED ED	Eel River Salmon Restoratin Project Education Coordinator	Eel River Salmon Restoration Project	1
	CCSE Education Programs	Central Coast Salmon Enhancement	1
ED	Creek Days, Eel River Environmental Education Fair	Eel River Watershed Improvement Group	1
ED	Etna Union High School District Watershed Education Program	Siskiyou Resource Conservation District	1
ED	Fisheries & Watersheds Education Project	Jughandle Creek Nature Center	1
MD	Instream Cover Enhancement Monitoring & Evaluation Program-Lower Freshwater Creek	Coastal Steam Restoration	1
MD	Mill Creek Restoration Project: Monitoring Component	Mendocino County Water Agency	1
MD	Long-term Coho Salmon & Steelhead Trout Monitoring in Coastal Marin County	Point Reyes National Seashore Association	1
MD	Smith River Stream Habitat Inventory	Siskiyou Research Group	1
MD	Monitoring and Evaluation of Current and historical Physical Habitat Conditions in Klamath River Est	Yurok Tribal Fisheries Program	1
OR	Project coordinator for the Southern California Steelhead Coalition	California Trout, Inc.	
OR	Promoting Sound Resource Management Practices and Policies	The Buckeye Conservancy	
OR	FishNet 4C-Fishery Network of the Central California Coastal Counties.	FishNet 4C-Marin County	1
OR	Russian River Watershed Council Organization Development	Mendocino County Resource Conservation District	
OR	Matilija Coalition Organizatinal Support Coastal Streams Coordination	Matilija Coalition	
OR	ERWIG Group Support and Assistance Shasta	Rural Human Service	
OR	CRMP Coordinator	Eel River Wateshed Improvement Group	
OR	Scott River Watershed Council	Great Northern Corporation	
OR	Salmon River Watershed Organization Support Smith River Watershed Coordinator Tri-County FISH Team	Siskiyou Resource Conservation District	
OR	Landowner & Community Outreach for Mattole Fisheries Restoration	Salmon River Restoration Council	
OR	Gualala River Watershed Outreach and Education Program	Del Norte County	
OR		City of Santa Barbara	
R	Five Counties Salmon Conservation Program	Mattole Restoration Council	
		Sotoyome Resource Conservation District Trinity County Planning Dept., Natural Resources Division	1

Table A-1. Public Involvement, Planning, Research, Monitoring, Education and Habitat Acquisition Action Items

(ype*	Project Title	Grant Recipient	
PL	Ten Mile River Watershed Assessment Project	Trout Unlimited	
PL	Davis Creek Watershed Assessment and Planning	Eel River Watershed Improvement Group	1
PL	Santa Angelina Ranch Road Inventory	Natural Resources Management Corp.	1
PL	Fearrien Ranch Road Inventory	Natural Resources Management Corp.	1
PL	Redwood Creek Watershed Inventory and Restoration Planning, Project Area #7	Pacific Coast Fish, Wildlife, and Wetlands Restoration Assoc.	
PL	Wilson Creek Watershed Inventory and Restoration Planning Project	Pacific Coast Fish, Wildlife, and Wetlands Restoration Assoc.	
PL	Diamond "Oil/Brightman Ranch Erosion Hazard Assessment	Eel River Watershed Improvement Group	1
PL	Nielson Ranch Subdivision Watershed Erosion Hazard Assessment	Eel River Watershed Improvement Group	1
PL	Shasta Irrigation Alternatives Investigation	Great Northern Corporation	1
PL	Leggett Creek Watershed Planning Project	Eel River Salmon Restoration Project, PCFFA	1
PL	Big Lagoon Restoration Design - Muir Beach	National Park Service, Golden Gate National Recreation Area	1
PL	County of Santa Cruz Road Crossing and Salmonid Passage Assessment	County of Santa Cruz	1
PL	Salmon Creek Watershed assessment 2002-PUSCWA-2002	Jack Monschke Watershed Management	
.~L	Assessment of Giant Reed & Restoration Planning - Napa River Watershed	Circuit Rider Productions, Inc.	1
PL	SFC SPIP Barrier Assessment Project 1	San Francisquito Creek Joint Powers Authority	1
PL	Assessment of Scott River Flow Enhancement Options	Siskiyou Resource Conservation District	1
PL	Irmulco Road Corporation Watershed Inventory and Implementation Planning Project	Pacific Watershed Associates (PWA)	
PL	Carpinteria Creek Watershed Plan	Cachuma Resource Conservation District	
PL SC	Habitat Assessment and Restoration Planning in the Salt Creek Watershed	Yurok Tribal Fisheries Program	1
SC SC	Piru Diversion Fish Screen	United Water Conservation District	1
	Scott River Fish Screening Program III	Siskiyou Resource Conservation District	1
	Fish Screen Retrofit	Humboldt Bay Municipal Water District	1
TE	California Salmonid Stream Habitat Restoration Manual - Three New Sections	Dept. of Fish and Game	
TE TE	Basins of Relations: Creating Community Watershed Groups	Occidental Arts & Ecology Center	
WD	2003 Salmonid Restoration Conference	Salmonid Restoration Federation	
	Stream Gauging Project	California Dept. of Water Resources	

Table A-1. Public Involvement, Planning, Research, Monitoring, Education and Habitat Acquisition Action Items

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rype*	Project Title	Grant Recipient

*	Project Type
SC	Fish Screening of Diversions
HR	Riparian Restoration
PL	Watershed Evaluation, Assessment, and Planning
OR	Watershed Organization Support Education
ED	Technical Training
TE	Monitoring Projects that Provide Baseline and/or Trend Data
MD	AmeriCorps Program Only
AC	

Table A-1. Public Involvement, Planning, Research, Monitoring, Education and Habitat Acquisition Action Items

Project type*	Project Title	Grant Recipient

*	Project Type
SC	Fish Screening of Diversions
HR	Riparian Restoration
PL	Watershed Evaluation, Assessment, and Planning
OR	Watershed Organization Support
ED	Education
TE	Technical Training
MD	Monitoring Projects that Provide Baseline and/or Trend Data
AC	AmeriCorps Program Only

Table A-2. Minor Action Items

PROJ. TYPE*	PROJECT TITLE	Grant Recipient
HR	Shasta River CRMP Tree Wrapping for Beaver Control	Great Northern Corp./Shasta River CRMP
HR	Seely Creek Watershed Assoc. Riparian Planting Project	Restoration Forestry, Inc.
HR	Lawrence Creek Riparian Enhancement Project	Coastal Streams Restoration
HR	Price Creek Riparian Restoration	Eel River Watershed Improvement Group
HR	Bear River Riparian Planting	California Conservation Corps
HR	Middle Creek Riparian Restoration	Mattole Restoration Council

Table A-3

Del Norte

Alexandre EcoDairy Riparian Enhancement Project: Moseley Ranch Site
Elk Valley Road/Jordan Creek Box Culvert Stream Rehabilitation Project
Mynot Creek Road/Mynot Creek Box Culvert Migration Barrier (Removal & Stream Rehabilitation)
Peacock Creek Fish Passage-Barrier Removal Project

Humboldt

Bear River, McBride Project Phase 3
Bear River, Morrison Ranch Project
Blue Rock Creek Dam Removal
Briceland Sediment Reduction and Water Quality Improvement
Butte Creek Erosion Control Project
Dobbyn Creek at Ft. Seward Bridge Project
Lawrence Creek Riparian, Project Phase 2
Little River Watershed Improvement Project
Lower North Fork Mad River Cover Enhancement Program
Miller Creek Fish Habitat Structure Project
N.F. Yager Creek Culvert Installation
Redwood Creek Watershed Improvement Project
Salmon Creek Watershed Riparian Restoration Project 2002-HR/SCW-2002-HR
Salmon Creek Wateshed Restoration Project 2002-HS/SCW-2002. HS
Seely Creek Teepee Burner Site, L WD Augmentation
Seely Creek Watershed Assoc. Riparian Planting Project
Sweet Creek Riparian
Teague Ranch Bank Stabilization Project
Tom Long Creek Diversion Gully Fixes and Culvert Upgrades Upper Van Duzen Erosion Control Project

Humboldt & Mendocino

Upper Mattole River Watershed Restoration Implementation Project

Lake

Lower Soda Creek Riparian Improvement Project

Mendocino

Oago Creek Restoration Project Elk Creek Sediment Control Project

Feliz Creek Riparian Restoration and Fish Habitat Improvement

Hayworth Creek Sediment Control and Fish Passage Improvement
Hungry Hollow Road Mile Two Upgrade
Jack of Hearts Creek Sediment Reduction Project
John Smith Creek Barrier Modification and In stream Habitat Restoration Project
Mill Creek Channel Restoration (2002)

Mendocino & Humboldt

Upper Mattole Large Woody Debris, 2002

San Mateo

San Francisquito Creek Steel head Passage Improvement Program

Santa Cruz

Bates Creek Dam Reservoir Assessment & Restoration Plan

Siskiyou

Beck Irrigation Tail Water Capture Project
Diversion Improvement Project.
Etna City Dam Juvenile Fish Passage Structure
Hart Ranch Little Shasta Exclusion Fence Lower
Kidder Creek Enhancement Project Meamber
Tail Water Project
RY Ranch Tail Water management
Scott River Fish Screening Program III
Scott River Fish Screening Program IV
Shackleford Creek Demonstration Project

Sonoma

Lower Green Valley Cr. Restoration, Martinelli & Hartford Court
Maacama Creek Enhancement
Pena Creek Riparian Restoration and Fish Habitat Improvement Project
Pole Mountain Creek Instream Habitat Enhancement
Ward CreekiGualala River Watershed Improvement Project

APPENDIX B MITIGATION MEASURES, MONITORING AND REPORTING PROGRAM FOR THE 2002 FISHERY RESTORATION GRANTS PROGRAM

MITIGATION

I. AESTHETICS

No specific mitigation measures are required to protect aesthetics.

II. AGRICULTURE RESOURCES

No specific mitigation measures are required to protect agricultural resources.

III. AIR QUALITY

No specific mitigation measures are required to protect air quality.

IV. BIOLOGICAL RESOURCES

General Measures for Protection of Biological Resources

1) Timing. To avoid impacts to aquatic habitat the activities carried out in the restoration program typically occur during the summer dry season.
   a) Work around streams will be confined to the period of July 1 through November 1 or the first rainfall. This is to take advantage of low stream flows and avoids the spawning and egg/alevin incubation period of salmon and steelhead.

   b) Upslope work generally occurs during the same period as stream work. Road decommissioning and other sediment reduction activities are dependent on soil moisture content. Work may be delayed at some sites after July 1 to allow soils to dry out adequately; equipment access and effectiveness is inhibited by wet conditions.

   c) The permissible work window for individual work sites will be further constrained as necessary to avoid the nesting or breeding seasons of birds and terrestrial animals. At most sites with potential for raptor (including northern spotted owls) and migratory bird nesting, if work is conditioned to start after July 31, potential impaCts will be avoided and no surveys will be required. For work sites that might contain nesting marbled murrelets, the starting date will be September 15 in the r'bsence of surveys. For work sites within one half mile of nesting greater sandhill cranes, the starting date will be July 15. The work window at individual

work sites could be advanced if surveys determine that nesting birds will not be impacted.

d) For restoration work that could affect swallow nesting habitat (such as removal of culverts showing evidence of past swallow nesting), construction will occur after August 31 to avoid the swallow nesting period. Alternatively, the suitable bridge nesting habitat will be netted before initiation of the breeding season to prevent nesting. Netting must be installed before any nesting activity begins, generally prior to March 1. Swallows must be excluded from areas where construction activities cause nest damage or abandonment.

e) Planting of seedlings shall begin after December 1, or when sufficient rainfall has occurred to ensure the best chance of survival of the seedlings, but in no case after April 1.

2) During all activities at project work sites, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.

3) Staging/storage areas for equipment, materials, fuels, lubricants, and solvents, will be located outside of the stream's high water channel and associated riparian area. Stationary equipment such as motors, pumps, generators, compressors, and welders located within the dry portion of the stream channel or adjacent to the stream, will be positioned over drip-pans. Vehicles will be moved out of the normal high water area of the stream prior to refueling and lubricating. The contractor shall ensure that contamination of habitat does not occur during such operations. Prior to the onset of work, DFG shall ensure that the contractor has prepared a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

4) The contractor shall ensure that the spread or introduction of invasive exotic plants shall be avoided to the maximum extent possible. When practicable, invasive exotic plants at the work site shall be removed.

5) The number of access routes, number and size of staging areas, and the total area of the work site activity shall be limited to the minimum necessary to complete the restoration action.

6) Any equipment work within the stream channel shall be performed in isolation from the flowing stream. If there is any flow when the work is done, the contractor shall construct coffer dams upstream and downstream of the excavation site and divert all flow from upstream of the upstream dam to

downstream of the downstream dam. The coffer dams may be constructed with clean river gravel or sand bags, and may be sealed with sheet plastic. Sand bags and any sheet plastic shall be removed from the stream upon project completion. Clean river gravel may be left in the stream, but the coffer dams must be breached to return the stream flow to its natural channel.

7) For minor actions, where the disturbance to construct coffer dams to isolate the work site would be greater than to complete the action (for example, placement of a single boulder cluster), then measures will be put in place immediately downstream of the work site to capture suspended sediment. This may include installation of silt catchment fences across the stream, or placement of a filter berm of clean river gravel. Silt fences and other non-native materials will be removed from the stream following completion of the activity. Gravel berms may be left in place after breaching, provided they do not impede the stream flow.

8) Any equipment entering the active stream (for example, in the process of installing a coffer dam) shall be preceded by an individual on foot to displace wildlife and prevent them from being crushed.

9) If any wildlife is encountered during the course of construction, said wildlife shall be allowed to leave the construction area unharmed, and shall be flushed, hazed, or herded in a safe direction away from the project site.

10)Any red tree vole nests encountered at a work site will be flagged and avoided during construction.

11)For any work sites containing western pond turtles, the contractor shall provide to the DFG contract manager for review and approval, a list of the exclusion measures that will be used at their work site to prevent take or injury to any individual pond turtles that could occur on the site. The contractor shall ensure that the approved exclusion measures are in place prior to construction. Any turtles found within the exclusion zone shall be moved to a safe location upstream or downstream of the work site, prior to construction.

12)AII habitat improvements shall be done in accordance with techniques in the "California Salmonid Stream Habitat Restoration ManuaL" The most current version of the manual is available at: http://www.dfq.ca.gov/habitats.

Specific Measures for Endangered, Rare, or Threatened Species That Could Occur at Specific Work Sites

Rare Plants

The work sites for the 2002 grants projects are within the range of a variety of rare plant species. The plant species found on a State or Federal special status list that might be associated with the 2002 grants projects, was determined from a search of DFG's Natural Diversity Database. Because of the large number of widely scattered work sites proposed, it is not feasible to survey individual work sites in advance and still be able to implement the restoration projects, due to time limits on the availability of restoration funds. Lists of special status plant species that might occur at individual work sites are presented in Appendix A. Past experience with grants projects from previous years has shown that the potential for adverse impacts on rare plants at salmonid restoration work sites is very low. Few sites surveyed for rare plants between 1999 and 2001 were found to have rare plant colonies; disturbance of rare plants was avoided in all cases. In order to avoid impacts to rare plants during the 2002 grants projects, the following mitigation measures will be implemented:

1) DFG will survey all work sites for rare plants prior to any ground disturbing activities. Rare plant surveys will be conducted following the "Guidelines for Assessing the Effects of Proposed Developments on Rare and Endangered Plants and Plant Communities" (DFG, 2000). These guidelines are available on the web at: http://www.dfg.ca.gov/hcpb/species/stds_gdl/survmonitr.shtml

2) If any special status plant species are identified at a work site, DFG will require one or more of the following protective measures to be implemented before work can proceed:

   a) Fencing to prevent accidental disturbance of rare plants during construction,

   b) On-site monitoring by a qualified biologist during construction to assure that rare plants are not disturbed, and

   c) Redesign of proposed work to avoid disturbance of rare plants.

3) If it becomes impossible to implement the project at a work site without potentially significant impacts to rare plants, then activity at that work site will be discontinued.

4) DFG shall ensure that the contractor or responsible party is aware of these site-specific conditions, and will inspect the work site before, during, and after completion of the action item.

California Freshwater Shrimp *(Syncaris pacifica)*

Of the 52 work sites proposed as part of the 2002 grants program, 3 occur within the range of California freshwater shrimp (CFS) (Appendix A). The range of the CFS include Marin, Napa, and Sonoma counties, excluding the Gualala River watershed. Potential impacts to CFS will be mitigated by application of the following measures:

Qualified DFG personnel will survey each site for CFS before allowing work to proceed and where appropriate, prior to issuance of a Streambed Alteration Agreement. In streams where CFS are present, DFG will require the contractor to implement the mitigation measures listed below. If necessary mitigation measures cannot be implemented or the project actions proposed at a specific work site cannot be modified to prevent or avoid potential impacts to CFS or their habitat, then activity at that work site will be discontinued.

1) Work will be performed only in riffle, shallow run, or dry habitats, avoiding low velocity pool and run habitats that may support CFS, an endangered species. Shallow run habitat is defined as a run with a maximum depth, at any point, less than 12 inches, and without undercut banks or vegetation overhanging into the water.

2) Hand placement of logs or rocks will be permitted in pool or run habitat in stream reaches where CFS are known to be present only if the specific pool or run has been found to be free of CFS by a qualified DFG biologist, and the placement will not adversely affect potential CFS habitat.

3) Care shall be taken during placement or movement of materials in the stream to prevent any damage to undercut stream banks and to minimize damage to any streamside vegetation. Streamside vegetation overhanging into pools or runs shall not be modified.

4) No log or rock weirs (including vortex rock weirs) shall be constructed that would span tl;1e full width of the low flow stream channel.

5) DFG must be notified at least one week in advance of the date on which work will start in the stream, so that a qualified DFG biologist can monitor activities at the work site. All work in the stream shall be stopped immediately if it is determined by DFG that the work has the potential to adversely impact on the CFS or its habitat. Work shall not recommence until DFG is satisfied that there will be no impact on the CFS.

6) The contractor is required to notify the U. S. Fish and Wildlife Service (USFWS) four weeks before work is scheduled to begin at the site, and provide access for USFWS to inspect the work if requested. The contractor will implement any additional mitigation requested by USFWS.

Coho Salmon *(Oncorhvnchus kisutch),* Chinook Salmon *(Oncorhvnchus tsha,wvtscha)* Steel head *(Oncorhvnchus mvkiss),* and Coast Cutthroat Trout
(Oncorhvnchus clarki clarkI)

While all of the work proposed under this program will enhance habitat for one or more of these species, 28 of the 52 work sites proposed as part of the 2002 grants program will involve instream work in their habitat (Appendix A). In order to avoid any potential for negative impacts to these species the following measures will be implemented:

1) Project work within the wetted stream shall be limited to the period between July 1 and November 1, or the first significant fall rainfall. This is to take advantage of low stream flows and to avoid the spawning and egg/alevin incubation period of salmon and steelhead. Whenever possible, the work period at individual sites shall be further limited to entirely avoid periods when salmonids are present (for example, in a seasonal creek, work will be confined to the period when the stream is dry).

2) No heavy equipment shall operate in the live stream, except as may be necessary to construct coffer dams to divert stream flow and isolate the work site.

3) Work must be performed in isolation from the flowing stream. If there is any flow when the work is done, the operator shall construct coffer dams upstream and downstream of the excavation site and divert all flow from upstream of the upstream dam to downstream of the downstream dam. The coffer dams may be constructed with clean river gravel or sand bags, and may be sealed with sheet plastic. Sand bags and any sheet plastic shall be removed from the stream upon project completion. Clean river gravel may be left in the stream, but the coffer dams must be breached to return the stream flow to its natural channel.

4) For minor actions, where the disturbance to construct coffer dams to isolate the work site would be greater than to complete the action (for example, placement of a single boulder cluster), measures will be put in place immediately downstream of the work site to capture suspended sediment. This may include installation of silt catchment fences across the stream, or placement of filter berm of clean river gravel. Silt fences and other non-native materials will be removed from the stream following completion of the activity. Gravel berms may be left in place after breaching, provided they do not impede the stream flow.

5) The channel shall not be excavatea for the purpose of isolating the workspace from flowing water.

6) The operator shall obtain a biologist, with all necessary State and Federal permits, to rescue any fish within work sites prior to dewatering. Rescued fish shall be moved to the nearest appropriate site on the stream. A record shall be maintained of all fish rescued and moved, and the record shall be provided to DFG.

7) If it is necessary to divert flow around the work site, either by pump or by gravity flow, the suction end of the intake pipe shall be fitted with fish screens meeting DFG and NMFS criteria to prevent entrainment or impingement of small fish. Any turbid water pumped from the work site itself to maintain it in a dewatered state shall be disposed of in an upland location where it will not drain directly into any stream channel.

8) Any disturbed banks shall be fully restored upon completion of construction. Revegetation shall be done using native species. Planting techniques can include seed casting, hydroseeding, or live planti~g methods using the techniques in the latest version of the California Salmonid Stream Habitat Restoration Manual.

9) Suitable large woody debris removed from fish passage barriers that is not used for habitat enhancement, shall be left within the riparian zone so as to provide a source for future recruitment of wood into the stream.

1 O)lf for some reason these mitigation measures cannot be implemented, or the project actions proposed at a specific work site cannot be modified to prevent or avoid potential impacts to anadromous salmon ids or their habitat, then activity at that work site will be discontinued.

California Red-Legged Frog *(Rana aurora dravtoniJ1*

Two of the work sites proposed as part of the 2002 grants program are within potential habitat for the California red-legged frogs (CRLF). One of these sites (San Francisquito Creek Steel head Passage Improvement, San Mateo County) has no potential to adversely impact CRLF; activity at this site will be confined to cutting a notch in an existing concrete weir using hand-operated equipment. Activities proposed for the other site (Bates Creek Dam Assessment, Santa Cruz County) will not remove or degrade CRLF habitat; however, precautions will be required at this site to avoid the potential for take of CRLF while using heavy equipment to collect sediment samples from behind Bates Creek Dam. To avoid this potential impact, the following mitigation measures will be implemented:

1) A biologist approved by the USFWS shall survey the work site at least two weeks before the onset of activities. If CRLF, tadpoles, or eggs are found, the approved biologist shall contact the USFWS for approval to move the animals out of the work site. If the USFWS approves moving animals, the approved biologist shall be allowed sufficient time to move CRLF from the

work site before work activities begin. Only USFWS-approved biologists shall participate in the capture, handling, and monitoring of CRLF. If the USFWS does not approve moving CRLF out of the work area, the DFG will drop activities at the work site from the project.

2) Before any construction activities begin at a work site that may contain CRLF, a USFWS-approved biologist shall conduct a training session for all construction personnel. At a minimum the training shall include a description of the CRLF and its habitat, the importance of the CRLF and its habitat, the general measures that are being implemented to conserve the CRLF as they relate to the work site, and the work site boundaries where construction may occu r.

3) At any work site that may contain CRLF, all fueling and maintenance of vehicles, other equipment, and staging areas shall occur at least 20 meters from any riparian habitat or water body. The contractor shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, DFG shall ensure that the contractor has prepared a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

4) A USFWS-approved biologist shall be present at the work site until such time as all removal of CRLF, instruction of workers, and habitat disturbance associated with the restoration project have been completed. The USFWS-approved biologist shall have the authority to halt any action that might result in the loss of any CRLF or its habitat. If work is stopped, the USFWSapproved biologist shall immediately notify DFG and the USFWS.

5) Ground disturbing activities in potential CRLF habitat shall be restricted to the period between July 1 and October 15.

6) If a work site is temporarily dewatered by pumping, intakes shall be completely screened with wire mesh not larger than five millimeters to prevent CRLF from entering the pump system. Water shall be released or pumped downstream, at an appropriate rate, to maintain downstream flows during construction. Upon completion of construction activities, any barriers to flow shall be removed in a manner that would allow flow with the least disturbance to the substrate.

7) A USFWS-approved biologist shall permanently remove from within the project work site, any individuals of exotic species, such as bullfrogs, centrarchid fishes, and non-native crayfish, to the maximum extent possible. The contractor shall have the responsibility that such removals are done in compliance with the California Department of Fish and Game Code.

8) If for some reason these mitigation measures cannot be implemented or the project actions proposed at a specific work site cannot be modified to prevent or avoid potential impacts to CRLF or their habitat, then activity at that work site will be discontinued.

Greater Sandhill Crane *(Grus canadensis tabida)*

Of the 52 work sites proposed as part of the 2002 grants program, one is in suitable nesting habitat for the greater sandhill crane (Hart Ranch Little Shasta Exclusion Fence, Siskiyou County). Fence installation at this site will not remove or degrade greater sandhill crane habitat, but the potential exists for fence installation at this site to disrupt crane nesting. To avoid this potential impact, the following mitigation measures will be implemented at this site:

1) Prior to commencing work, DFG will survey the site to determine if greater sandhill cranes are nesting within a half mile of the work site. If nesting is occurring within a half mile radius of the work site, fence installation shall not begin until after July 15.

2) DFG shall ensure that the contractor or responsible party is aware of this site-specific condition, and will inspect the work site before, during, and after completion of the action item.

Marbled Murrelet *(Brachvrampus marmoratus)*

Of the 52 work sites proposed as part of the 2002 grants program, four are in potentially suitable habitat for the marbled murrelet (Appendix A). None of the activities proposed for these sites will remove or degrade marbled murrelet habitat, but the potential exists for noise from heavy equipment work at these sites to disrupt marbled murrelet nesting. To avoid this potential impact, the following mitigation measures will be implemented:

1) Work shall not begin within one quarter mile of any site with known or potential habitat for the marbled murrelet until after September 15.

2) The DFG shall ensure that the contractor or responsible party is aware of this site-specific condition, and will inspect the work site before, during, and after completion of the action item.

3) If for some reason these mitigation measures cannot be implemented or the project actions proposed at a specific work site cannot be modified to prevent or avoid potential impacts to marbled murrelet or their habitat, then activity at that work site will be discontinued.

Northern Spotted Owl *(Strix occidentalis caurina* [1]

Of the 52 work sites proposed as part of the 2002 grants program, 25 are in potentially suitable habitat for the northern spotted owl (Appendix A). None of the activities proposed for these sites will remove or degrade spotted owl habitat, but the potential exists for heavy equipment work at these sites to disrupt spotted owl nesting. To avoid this potential impact, the following mitigation measures will be implemented:

1) Work at any site with potential habitat for the northern spotted owl will not begin until after July 31.

2) The work window at individual work sites may be advanced prior to July 31, if surveys determine that nesting birds will not be negatively impacted.

3) DFG shall ensure that the contractor or responsible party is aware of this site-specific condition, and will inspect the work site before, during, and after completion of the action item.

4) If for some reason these mitigation measures cannot be implemented or the project actions proposed at a specific work site cannot be modified to prevent or avoid potential impacts to northern spotted owls or their habitat, then activity at that work site will be discontinued.

v. CULTURAL RESOURCES

Ground-disturbance will be required to implement the project at some work sites that have the potential to affect cultural resources. This potential impact will be avoided through implementation of the following mitigation r:neasures:

1) DFG will contract with a qualified archaeologist(s) to complete cultural resource surveys at any sites with the potential to be impacted prior to any ground-disturbing activities. Cultural resource surveys will be conducted using standard protocols.

2) If cultural resource sites are identified at a site, DFG will require one or more of the following protective measures to be implemented before work can proceed: a) Fencing to prevent accidental disturbance of cultural resources during construction, b) on-site monitoring by a cultural resource professional during construction to assure that cultural resources are not disturbed, c) redesign of proposed work to avoid disturbance of cultural resources.

3) DFG shall report any previously unknown historic or archeological remains discovered at a site to the U. S. Army Corps of Engineers as required in Permit #22323N.

4) If it becomes impossible to implement the project at a work site without disturbing cultural resources, then activity at that work site will be discontinued.

5) DFG shall ensure that the contractor or responsible party is aware of these site-specific conditions, and will inspect the work site before, during, and after completion of the action item.

VI. GEOLOGY **AND** SOILS

There is no potential for a significant adverse impact to geology and soils; implementation of the restoration project will contribute to an overall reduction in erosion and sedimentation. Existing roads will be used to access work sites. Ground disturbance at most work sites will be minimal, except for road improvements or decommissioning. Road improvements and decommissioning will involve moving large quantities of soil from road fills and stream crossings to restore historic land surface profiles and prevent chronic erosion and sediment delivery to streams. In order to avoid temporary increases in surface erosion, the following mitigation measures will be implemented:

1) Bare soil will be seeded, mulched, and planted as necessary, using best management practices described in the salmonid restoration handbook.

2) Soil will only be compacted to the extent necessary to reduce any surface erosion that may occur in the first heavy rainfall.

3) DFG shall ensure that the contractor or responsible party is aware of these site-specific conditions, and will inspect the work site before, during, and after' completion of the action item.

VII. **HAZARDS AND HAZARDOUS MATERIALS**

The project will not create a significant hazard to the public or the environment. At work sites requiring the use of heavy equipment, there is a small risk of an accident upsetting the machine and releasing fuel, oil, and coolant, or of an accidental spark from equipment igniting a fire. The potential for these impacts will be reduced to a less than significant level through implementation of the following mitigation measures:

1) The contractor shall have dependable radio or phone communication on-site to be able to report any accidents or fire that might occur.

2) Heavy equipment that will be used in these activities will be in good condition and will be inspected for leakage of coolant and petroleum products and repaired, if necessary, before work is started.

3) Work with heavy equipment will be performed in isolation from flowing water, except as may be necessary to construct coffer dams to divert stream flow and isolate the work site.

4) All equipment operators will be trained in the procedures to be taken should an accident occur. Prior to the onset of work, DFG shall ensure that the contractor has prepared a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.

5) All activities performed in or near a stream will have absorbent materials designed for spill containment and cleanup at the activity site for use in case of an accidental spill.

6) All fueling and maintenance of vehicles, other equipment, and staging/storage areas shall be located at least 20 meters from any riparian habitat or water body. The contractor shall ensure contamination of habitat does not occur during such operations.

7) Stationary equipment such as motors, pumps, generators, compressors, and welders, located within the dry portion of the stream channel or adjacent to the stream, will be positioned over drip-pans.

8) All internal combustion engines shall be fitted with spark arrestors.

9) The contractor shall have an appropriate fire extinguisher(s) and fire fighting tools (shovel and axe at a minimum) present at all times when there is a risk of fire.

10)Vehicles shall not be parked in tall grass or any other location where heat from the exhaust system could ignite a fire.

11)The contractor shall follow any additional rules the landowner has for fire prevention.

VIII. HYDROLOGY AND WATER QUALITY

1) Work shall be conducted during the period of lowest flow.

2) Work shall be performed in isolation from flowing water. If there is any flow when the work is done, the contractor shall construct coffer dams upstream and downstream of the excavation site and divert all flow from upstream of the upstream dam to downstream of the downstream dam. The coffer dams may be constructed with clean river gravel or sand bags, and may be sealed with sheet plastic. Sand bags and any sheet plastic shall be removed from the stream upon project completion. Clean river gravel may be left in the

stream, but the coffer dams must be breached to return the stream flow to its natural channel.

3) For minor actions, where the disturbance to construct coffer dams to isolate the work site would be greater than to complete the action (for example, placement of a single boulder cluster), then measures will be put in place immediately downstream of the work site to capture suspended sediment. This may include installation of silt catchment fences across the stream, or placement of filter berm of clean river gravel. Silt fences and other non-native materials will be removed from the stream following completion of the activity. Gravel berms may be left in place after breaching, provided they do not impede the stream flow.

4) Before work is allowed to proceed at a site, DFG will inspect the site to assure that turbidity control measures are in place.

X. MINERAL RESOURCES

No specific mitigation measures are required for mineral resources.

XI. NOISE

Personnel shall wear hearing protection while operating or working near noisy equipment (producing noise levels ~85 db, including chain saws, excavators and back hoes).

XII. POPULATION AND HOUSING

No specific mitigation measures are required for population and housing.

XIII. PUBLIC SERVICES

No specific mitigation measures are required for public services.

XIV. RECREATION

No specific mitigation measures are required for recreation.

xv. TRANSPORTATIONITRAFFIC

The project will not affect transportation/traffic, because erosion control and culvert replacement projects will occur in wildland/rural sites with very little use. There is a potential that culvert replacement at some work sites could temporarily interfere with emergency access. This potential impact will be avoided through implementation of the following mitigation measure at any sites where emergency access might be necessary:

1) During excavation for culvert replacement, the contractor shall provide a route for traffic around or through the construction site.

XVI. UTILITIES AND SERVICE SYSTEMS

No specific mitigation measures are required for utilities and service systems.

MONITORING AND REPORTING

1) DFG Contract Manager will inspect the work site before, during, and after completion of the action item, to ensure that all necessary mitigation measures to avoid impacts are properly implemented.

2) Immediately after completion of each action item, the project details shall be documented as outlined in the latest version of the California Salmonid Stream Habitat Restoration Manual, Part VIII. Project monitoring and evaluation and this material shall be made available to NMFS upon request.

3) An annual report shall be submitted to NMFS by December 30 of each year, which provides a summary of all restoration action items completed during the previous year. For road rehabilitation and culvert upgrade/removal action items, this report will include information on:

a) The miles of road decommissioned.

b) The miles of road made "hydrologically maintenance free."

c) The number of stream crossings upgraded.

d) The number of stream crossings removed and an estimate of cubic yards of sediment "saved."

e) The number of rocked fords constructed.

f) Documentation of compliance with applicable erosion control measures, including dates of project activities such as ground disturbance and implementation of erosion control measures.

g) Documentation of compliance with erosion control measures.

h) Documentation of the presence of listed and/or proposed for listing Pacific salmonids and dates of project activities in relation to potentially impacted life history stages.

i) Documentation of compliance with NMFS SWR performance criteria for fish passage and storm flow capacity for culverts.

4} Within three years of completion of instream action items accomplished under U. S. Army Corps of Engineers Permit #22323N. DFG will evaluate 10 percent of each project type after at least one, but not more than three winter high flows. Each project type will have 10 percent of the individual projects randomly selected by DFG for evaluation. This evaluation shall be recorded on standard habitat evaluation forms developed by DFG using procedures described in the "California Salmonid Stream Habitat Restoration Manual," Part VIII, Project Monitoring and Evaluation. The annual report to NMFS of completed action items described in number 3 above, shall also summarize the results of all restoration project evaluation completed during the previous year.

5) DFG shall report any previously unknown historic or archeological remains discovered at a site to the U. S. Army Corps of Engineers as required in Permit #22323N.

APPENDIX C

Guidelines for Conducting Project Specific Endangered, Rare and Threatened Species Surveys

This appendix sets forth survey protocols described more specifically in the Department of Fish and Game (DFG), "Environmental Services Field Manual," 1996. For more individual species details, survey protocols are available on the web at: http://www.dfq.ca . qov/hcpb/species/stds qd l/su rvmon itr .shtml.

Surveys conducted to assess the potential for individual activities to affect endangered, rare, or threatened species, should address all species as designated by the Fish and Game Commission and as defined by the California Environmental Quality Act guidelines [see Cal. Code Regs., title 14, § 15380 (CEQA Guidelines definition of "endangered, rare, or threatened species")].

A biological field survey must be conducted for each major action item to assess the potential for impact on endangered, rare or threatened species that might be affected by activity at a work site when:

a. The action item may alter habitat of an endangered, rare, or threatened species;

b. Endangered, rare, or threatened species have historically been identified in the area of the project activity, but recent surveys have not been done; or suitable but unoccupied habitat exists; or

c. A biological survey has never been conducted and it is unknown whether endangered, rare, or threatened species or their habitat exist at the project site or project impact area.

Biological consultants should be selected on the basis of possession of the following qualifications (in order of importance):

a. Field investigator experience in field sampling design and field methods;

b. Taxonomic experience and knowledge of species ecology;

c. Familiarity with the species of the area including endangered and threatened species; and

d. Familiarity with the appropriate State and Federal statutes related to collecting.

Field surveys should be conducted in a manner designed to locate any endangered, rare, or threatened species or their habitat that may be present. Specifically, surveys should be:

a. Conducted at the time of year when endangered, rare, or threatened species are both evident and identifiable. Field surveys should be scheduled to coincide with the appropriate breeding or other life history stage of animals when they are likely to be evident, or with peak flowering periods and/or during periods of phrenological development that are necessary to identify a plant species of concern.

b. Biological. Predictive surveys (which predict the occurrence of species based on the occurrence of habitat or other physical features, rather than by actual field inspection) should not be used as the sole method for impact assessment. Every species noted in the field should be identified to the extent necessary to determine whether it is threatened or endangered.

c. Conducted in a manner that is consistent with protection of the species. Collections of listed, candidate, or rare species must be in accordance with applicable State and Federal permit regulations (collection of Statelisted species requires a permit or memorandum of understanding with DFG; collection of Federally-listed species may require a Federal permit.) Collections will be permitted only when such actions are necessary for species identification and/or would not jeopardize the continued existence of the population. For plant identification, photography should be used to document identity and habitat whenever possible, but especially when the population cannot withstand collection of voucher specimens.

d. Conducted using appropriate field techniques in all habitats of the site to ensure a reasonably thorough coverage of potential impact areas. Techniques may be prescribed as part of the State and Federal permits authorizing such activities.

e. Well-documented. When an endangered or threatened species is located, a California Native Species (or Natural Community) Field Survey Form, or equivalent written form, should be completed and submitted to the Wildlife and Habitat Data Analysis Branch (DFG, 1416 Ninth Street, Room 1225, Sacramento, California 95814) for inclusion in the Natural Diversity Data Base.

Field survey reports, when required, shall be provided to DFG by the grant recipient and should contain the following information:

a. Project description including a detailed map of the project location and study area.

b. A written description of biological setting, including a vegetation map.

c. Detailed description of survey methodology.

d. Dates of field surveys.

e. Results of surveys, including detailed maps, the occurrence of threatened and endangered species and other important wildlife, or natural communities and habitats.

f. An assessment of potential impacts.

g. Discussion of the relative importance of the project to threatened or endangered species with consideration of nearby or induced developments, species occurrences, and statewide distribution.

h. Recommended measures to avoid jeopardizing endangered or threatened species.

i. List of all species identified.

j. Copies of all California Native Species Field Survey Forms or Natural Community Field Survey forms.

k. Name of field investigator(s).

l. References cited, permits held, persons contacted, museums visited, and location of all specimens.

EXHIBIT A

Upper Mattole River Restoration Implementation Project
STATEMENT OF WORK

Under direction of the Grantor, the Grantee will complete all work under the following conditions and terms:

1. Implement plans to protect and improve salmonid habitat in the Upper Mattole River. The project location in the Mattole headwaters is bounded by the watershed drainage divide to the south and the Thomson Creek and Baker Creek northern watershed divides to the north. The project is located in both Humboldt and Mendocino Counties on USGS 7.5' quadrangle maps, Bear Harbor and Briceland. The latitude of the project area is 40 00 00 and the longitude is 123 52 30. Access is from Briceland-Thorne road from the town of Whitethorn to Four Corners. The project area is in Township 5S, Range 2E, Sections 21, 22, 23, 26, 27, 28, 32, 33, 34, 35. See Exhibit C, Location Map, which is attached and made part of this agreement by this reference.

2. This project will protect and improve salmonid habitat by controlling and preventing road-related erosion identified on 24.18 miles of road within the Upper Mattole River watershed preventing potential delivery of 45,709 yards^3 of sediment. The contractor will decommission 19.13 miles of abandoned, decaying, inner gorge and mid-slope roads and upgrade 5.05 miles of maintained roads which currently deliver sediment to fish bearing waters

3. A total of 306 sites with an estimated future yield of 35,369 yards^3 of sediment will be treated. Decommission sites account for 272 of these while the remaining 34 sites are upgrades. See Exhibit D, Treatment Priorities, which is attached and made part of this agreement by this reference. All or part of the following treatments will be implemented:

   A. Stream crossings with potential delivery of 19,056 yards^3 of sediment account for 174 of these treatment sites (19 culverted fill crossings, 143 unculverted fills, 1 bridge, 7 Humboldt crossings, 3 pulled crossings, and 1 ford crossing). See Exhibit E, Stream Crossing Excavation, which is attached and made part of this agreement by this reference.

   B. Landslides with potential delivery of 15,515 yards^3 of sediment account for 107 of these treatment sites. See exhibit F, Fillslope and Landing Excavations, which is attached and made part of this agreement by this reference.

   C. Eight road surface sites with potential delivery of 229 yards^3 of sediment will be treated to correct road/ditch drainage problems.

4. The remaining work will address persistent surface erosion on 13.45 miles of

roadbed, ditch.. and cutbank with a potential delivery of 10,521 yds3 of sediment. See Exhibit G, Sediment Yield, which is attached and made part ofthi5 agreement by this reference.

A. This work will include a series or combination of road surface treatments such as constructing rolling dips and cross road drains, outsloping portions of road, and/or installing additional ditch relief culverts.

5. Sites which are expected to erode and deliver sediment to the stream are the only locations where work will be authorized for reimbursement under the terms of this agreement. Reimbursement will not be authorized for work done to improve esthetic values only.

6. Culverts that are replaced in fish bearing reaches of streanlS will be done in such a manner that will allow for fish passage and which meet National Marine Fishery Service criteria.

i. Removal of road and skid trails will include retrieving unstable material sidecast during road construction and excavation of stream crossings and other watercourse fill. Stream crossings will be excavated to original width, depth and slope to expose natural channel morphology and armor. Side slopes will generally match original contours above and below the road.

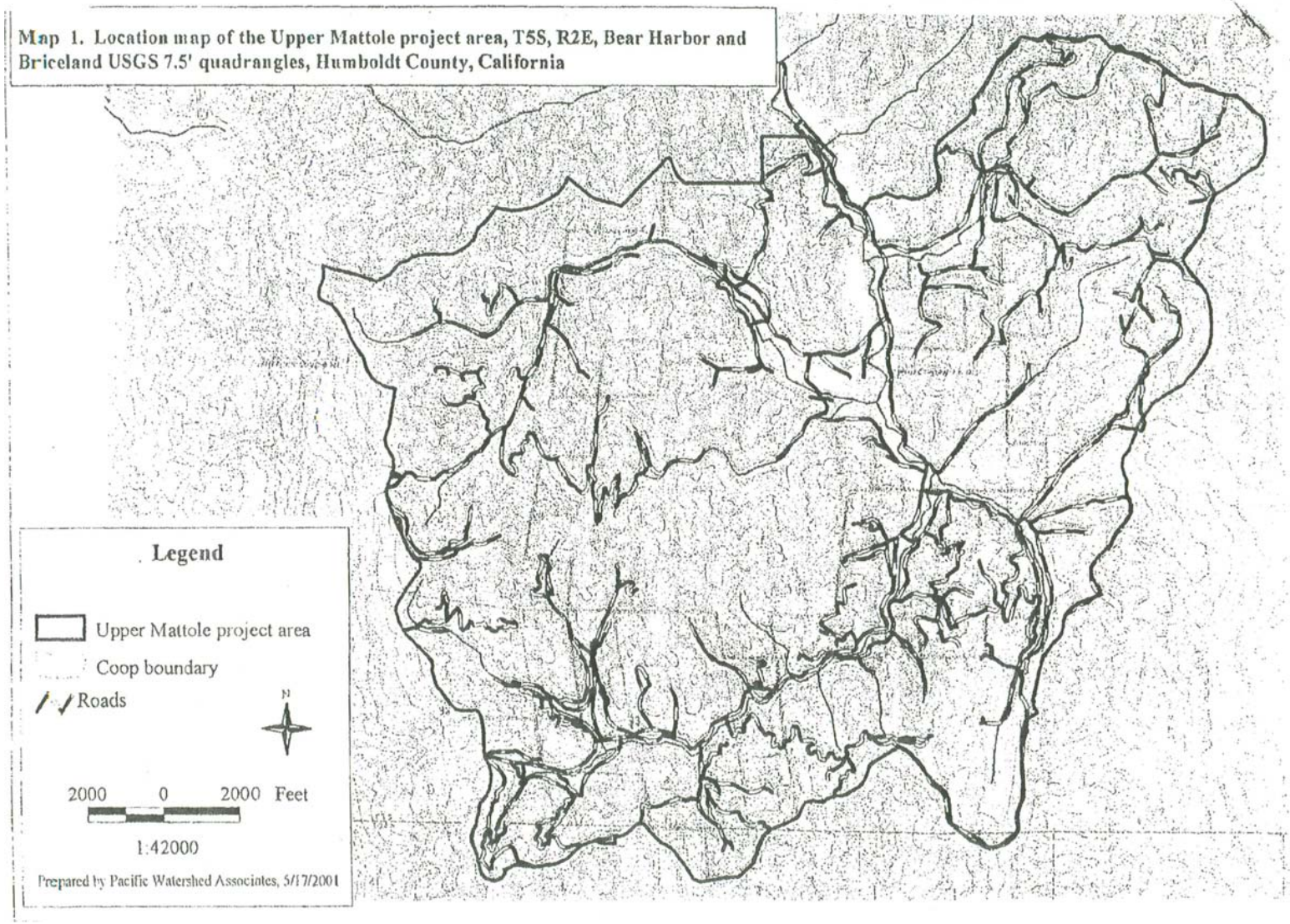
8. When fill material is placed on road benches for pennanent storage, the roadbench will be ripped or decompacted first. The fill will then be placed against the cutbank and shaped to blend with the sUlTounding topography that existed prior to road construction. Outsloping of the roadbed will occur, as needed to reduce potential sediment delivery to the stream where there is insufficient fin available to recontour the site or where there is evidence that the overa1l10ng term stability oftlle site does notjustiiy a full recontour treatment. Where practical, restored fill will be compacted to the top of the infiUed cut to reduce the potential [or seismically induced landsliding. Spoils material will be stored in stable locations where it will not erode. If stable spoils storage sites are not available within the project area, they will be end-hauled to a stable storage site outside of the project area. Woody debris will be scattered over the surface as a mulch upon completion of each site.

9. Implementation work will be conducted in the summerof2002 and 2003. All l1eavy equipment work will be conducted during summer and fall low flow periods to minimize impacts to water quality. Work will be scheduled around seasonal wildlife restrictions and weather.

10. AI] road upgrading or decommissioning will be done in accordance with techniques described in the "Handbook for Forest and Ranch Roads", (pWA 1994) and the *Cal(fornia Stream Habitat Restoration A1anual.*

11. The Grantee will acknowledge the participation of the Department ofFish and Game, SB 271 funds on any signs, flyers, or other types of written communication or notice to advertise or explain the Upper Mattole River Watershed Restoration Implementation Project.

Map 1. Location map of the Upper Mattole project area, T5S, R2E, Bear Harbor and Briceland USGS 7.5' quadrangles, Humboldt County, California



hibit C

Location Map

P0110505

'ORNIA DEPARTMENT OF FI . ND GAME
CEQA FINDINGS FOR THE
AGREEMENT REGARDING PROPOSED STREAM
OR LAKE ALTERATION #02-0053

Introduction

The California Environmental Quality Act (**CEQA**) (Public Resources Code section 21000, *et seq.*) and the State CEQA Guidelines (**Guidelines**) (Section 15000, et seq., Title 14, California Code of Regulations) require that no public agency shall approve or carry out a project for which a negative declaration has been completed that identifies one or more significant effect, unless such an agency makes the following finding as to each significant effect.

Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.

As the lead agency for the Negative Declaration (ND) the California Department of Fish and Game (Department) certified the ND for the project on **June 25, 2002.** The Department found that the project will not result into significant environmental effects with the mitigation measures required in, or incorporated into the project. **Sanctuary Forest, Inc.** assumed the right to complete the project.

The Department is issuing a stream or lake alteration agreement (Agreement) to the project applicant **Mr. Steve Gibson representing Sanctuary Forest, Inc.** The project is located on **the Upper Mattole River, Humboldt County,** Section 21, 22, 23, 26, 27, 28, 32, 33, 34, and 35, Township 5 South, Range 2 East.

Findings

The Department has considered the ND adopted for the project and has concluded that the Agreement should be issued under the terms and conditions specified therein. In this regard, the Department hereby adopts the findings set forth in the ND insofar as they pertain to the project's impacts on biological resources.

Signed: Donald Koch Date: July 2, 2002

DONALD B. KOCH
Regional Manager, Northern California-North Coast Region

2b

NOTICE OF DETERMINATION

TO: Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044

FROM: California Department of Fish and Game
Central Coast Region
P.O. Box 47
Yountville, CA 94599

SUBJECT: **Filing of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code**

PROJECT TITLE: **The 2002 Fishery Restoration Grants Program**

STATE CLEARINGHOUSE NUMBER: SCH #2002052106

LEAD AGENCY: **California Department of Fish and Game**
CONTACT: **Gene Geary, Environmental Scientist, (707) 944-5573**

PROJECT LOCATION: Del Norte, Humboldt, Lake, Mendocino, San Mateo, Santa Cruz, Siskiyou, Sonoma counties.

PROJECTDESCRIPTION: This project will use grant funds approved by the California Legislature to initiate activities designed to restore coastal streams and watersheds that historically produced large populations of salmon and steelhead

This is to advise that the California Department of Fish and Game as a Lead Agency approved the project described above on June 25, 2002 and has made the following determinations regarding the above described project pursuant to section 15075.

1. The project will not have a significant effect on the environment.
2. A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures were made a condition of the approval of the project.

This is to certify that a copy of the Negative Declaration prepared for this project is available to the general public and may be reviewed at: 7329 Silverado Trail, Napa, California 94558. Please contact the lead agency person specified above.

Jani Swanson for

Robert W. Floerke
Regional Manager
Central Coast Region

Donald Koch

Donald B. Koch
Regional Manager
Northern California-North Coast Region

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Notification No. 02-0053 Page 1 of 3

AGREEMENT REGARDING PROPOSED STREAM OR LAKE ALTERATION FISH AND GAME CODE SEC. 1600

THIS AGREEMENT, entered into between the State of California , Department of Fish and Game, Gary Flosi, Senior Fish Habitat Supervisor, hereinafter called the department, and Mr. Steve Gibson, representing Sanctuary Forest Inc. of Whitethorn, State of California, hereinafter called the Operator, is as follows:

Whereas, pursuant to Section 1603 of the California Fish and Game Code, the Operator, on the 03 Day of, March, 2002, notified the Department that he intends to substantially divert or obstruct the natural flow of, or substantially change the bed, channel, or bank of the following water: Mattole River, a tributary of the Pacific Ocean, in the County of Humboldt and Mendocino, State of California, in S numerous , T05S, R02E.

WHEREAS, the Department has determined that the activities proposed in the Operators notification may substantially affect existing fish and wildlife resources.

THEREFORE, IT IS AGREED THAT:

1. If this agreement is found to be in conflict with any other provision of law or general conditions of public safety, it is void.

2. All provisions of this agreement remain in force throughout the term of the agreement. Any provisions of the agreement may be amended or the agreement may be terminated at any time provided such amendment and/or termination is agreed to in writing by both parties. Mutually approved amendments become part of the original agreement and are subject to all previously negotiated provisions.

3. A copy of this agreement must be provided to all contractors and subcontractors and shall be available at the project site during all periods of active work.

4. The Operator, contractor, or subcontractor are jointly liable for compliance with the terms of this agreement. Any violation of the terms of this agreement shall make this agreement null and void, and all activity must stop until another agreement is made.

PROVISIONS:

1. Only work described in the project description submitted in the agreement notification will be allowed. All work must be approved in writing in advance by the Department contract manager assigned to the project.

2. All work in or near the stream shall be confined to the period: July 01 to October 31 duringthe term of the agreement,.except as described in the attached memo dated May 22, 2002 describing seasonal work restrictions to prevent or minimize potential disturbance to nesting marbled murrelets:

3. If, in the opinion of the Department, conditions arise or change in such a manner as to be considered deletenous to aquatic lite, operations shall cease until corrective measures are taken.

4. Stream bank modifications to facilitate project construction operations shalI be performed in a manner that will not cause negative impacts upstream and downstream in the stream channel, such as accelerated bank erosion or loss of vegetation.

5. The disturbance or removal of vegetation wi11 not exceed the minimum necessary to complete operations.

6. Access to the work site will be on existing roads and access ramps when available.

7. Any materials placed in seasonally dry portions of a stream that could be washed downstream or could be deleterious to aquatic life, wildlife, or riparian habitat shall be removed from the project site prior to inundation by high flows.

8. Any equipment or vehicles operated within or adjacent to the stream will be checked and maintained daily to prevent fuel, lubricant, or coolant leaks.

9. Staging/storage areas for equipment, fuels, lubricants and solvents wi11 be located outside of the stream's nonnal high water area. Vehicles and equipment win be moved out of the normal high water area of the stream prior to refueling and lubricating.

10. During construction, the contractor shall not dump any litter or construction debris on the site. An such debris and waste shal1 be properly disposed of at an appropriate site.

11. Clean-up of all spills will begin immediately. The Department will be notified by the Operator of any spills and will be consulted regarding clean-up procedures.

12. Water flows may be diverted to allow access to the project site. Such diversions shall be constructed of on site naturally occurring gravels. Diverted water shall remain within the natural banks of the stream.

13. If the Operator's work changes from that stated in the notification specified above, this agreement is no longer valid.

14. Nothing in this agreement authorizes the Operator to trespass on any land or property, nor does it relieve the Operator of responsibility for compliance with applicable federal, state, or local laws or ordinances.

15. Additional Provisions:

This agreement become effective upon signature by all parties. This agreement is valid until December 31, 2003 or completion of the project whichever comes first.

Operator

Program Coordinator
Title

Sanctuary Forest, Inc
Organization

June 18, 2002
Date

Department Representative

Reg Mgr
Title

7/2/02
Date

State of California Flex your Power Resources Agency

Memorandum

To: **Mr. Gary Flosi** Date: May 22, 2002
Northern California-North Coast Region
Department of Fish and Game
1455 Sandy Prairie Court, Suite J, Fortuna, CA 95540

From: **Kenneth C. Moore,** Senior Environmental Scientist
Coastal Timberland Planning
Northern California-North Coast Region
Department of Fish and Game
619 Second St., Eureka, CA 95501
(707) 441-5670

Subject: Marbled Murrelet Consultation 02-R1-CTP-013-MAMU for 2001 SB 271 Watershed Assessment and Erosion Prevention Planning Project for Upper Mattole River (Upper Mattole River and Forest Cooperative, Humboldt and Mendocino Counties, California).

The Department of Fish and Game (DFG) has reviewed The Watershed Assessment and Erosion Prevention Planning Project for Upper Mattole River prepared in 2001 (see attached DFG Maps A and B) to assess the project's potential to impact the marbled murrelet (*Brachyramphus marmoratus*). The marbled murrelet is listed as endangered pursuant to Fish and Game Code (FGC) §2050 et seq. and as threatened pursuant to §1531, Title 16, United States Code et seq. FGC §2053 prohibits state agencies from approving projects that jeopardize the continued existence of any threatened or endangered species or that will result in the destruction or adverse modification of habitat essential to the continued existence of those species if reasonable and prudent alternatives are available. FGC §2080 states that no person may "take" an endangered species, where take is defined as to hunt, pursue, catch, capture, or kill, or attempt to engage in such activities.

The project proposes to decommission or upgrade a number of roads within the upper Mattole watershed. Activities involved include decompaction, excavation, recontouring, culvert replacement, bridge installation, and rocking of road surfaces. Equipment to be used includes excavators, backhoes, graders, caterpillar tractors, and dump trucks. The project is proposed to be conducted throughout the summer and fall months of 2002 and 2003; work generally must be complete for the season by the time the winter rainy season begins. This work period substantially overlaps the marbled murrelet breeding season (March 24 – September 15). Such work conducted in close proximity to nesting marbled murrelets has the potential to disturb nesting adults and chicks and may result in interruptions in incubation or brooding, aborted feeding attempts, or nest abandonment. No habitat modification (i.e., harvest of trees within or adjacent to potential marbled murrelet nesting stands) will occur.

The locations of work sites relative to potential marbled murrelet nesting habitat (see attached DFG Map A) were reviewed using topographic maps and aerial photos. Environmental Scientist David Lancaster participated in a site visit with Mr. Timothy Metz of Restoration Forestry, Inc. and Mr. Steven Gibson of Sanctuary Forest, Inc. on May 20, 2002. Based upon on-going levels of disturbance along the Mattole Road, visual and auditory

screening of work sites from potential marbled murrelet nesting stands, and distance of work sites from potential marbled murrelet nesting stands, it has been determined that restrictions are not necessary at work sites located in zones E, F, and G (see attached DFG Map B) to prevent take of marbled murrelets.

Seasonal work restrictions are necessary at the remainder of the work sites in order to prevent or minimize potential disturbance of nesting marbled murrelets. Operations may commence after August 31 (no operations March 24 – August 31) in zone D (see attached DFG Map B) so long as the disturbance minimization measures listed below are employed. Work may not be conducted in zones A, B, and C (see attached DFG Map B) during the marbled murrelet breeding season (March 24 – September 15).

Operation of the proposed project will not likely result in the take of marbled murrelets if the following mitigation measures are incorporated into the project:

1. The marbled murrelet breeding season shall be March 24 through September 15.

2. No work shall be conducted during the marbled murrelet breeding season (March 24 – September 15) in zones A, B, and C as identified on attached DFG Map B.

3. No work shall be conducted from March 24 through August 31 within zone D as identified on attached DFG Map B.

4. The following restrictions shall apply from September 1 through September 15 within zone D:
    a. Work shall be limited to the period between 2 hours after sunrise and 2 hours prior to sunset.
    b. The maximum speed limit for all vehicles, including trucks used to haul heavy equipment, shall be 15 miles per hour.
    c. Loud noises shall be minimized. Activities including, but not limited to, the use of "Jake" brakes or horns and slamming of dump truck tailgates shall not occur.
    d. Equipment and personnel shall be kept as far away from potential habitat as practicable. Do not stage equipment or material, park, or allow foot traffic closer to potential habitat than the work site nearest the habitat on that segment of road.
    e. The removal of vegetation screening work sites from potential habitat shall be minimized.
    f. The amount of activity occurring within the zone shall be minimized. Travel within the zone shall be restricted to the minimum required to complete the project. Where possible, equipment and material should be staged to reduce travel within the zone.

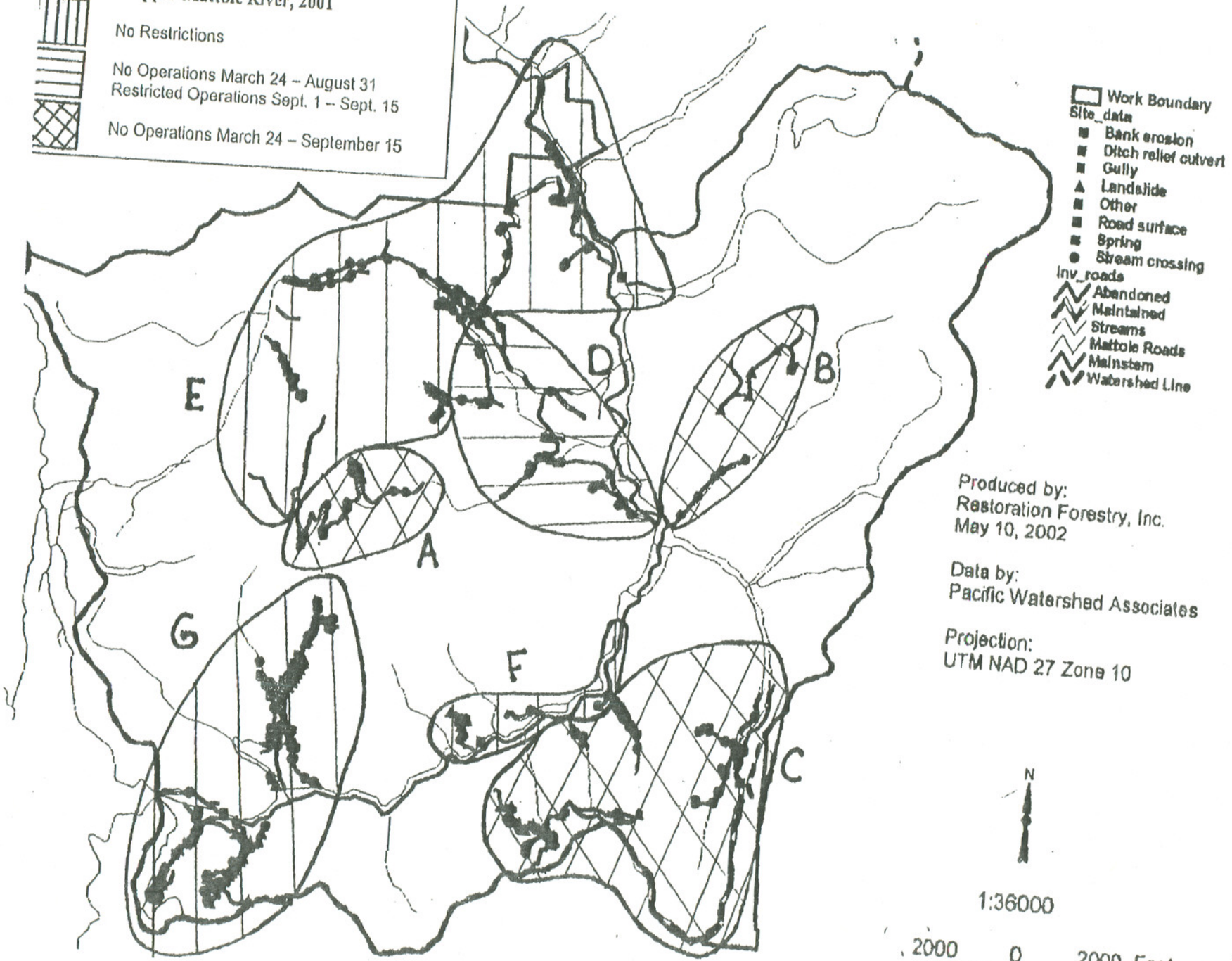
Please direct inquiries regarding this memorandum to Dr. Scott Osborn at (707) 445-7805 or Mr. David Lancaster at (707) 441-5669.

bled Murrelet Consultation 02-R1-CTP-013-MAMU
ershed Assessment and Erosion Planning Project
For Upper Mattole River, 2001

No Restrictions

No Operations March 24 – August 31
Restricted Operations Sept. 1 – Sept. 15

No Operations March 24 – September 15



Work Boundary
Site_data
Bank erosion
Ditch relief culvert
Gully
Landslide
Other
Road surface
Spring
Stream crossing
Inv_roads
Abandoned
Maintained
Streams
Mattole Roads
Mainstem
Watershed Line

Produced by:
Restoration Forestry, Inc.
May 10, 2002

Data by:
Pacific Watershed Associates

Projection:
UTM NAD 27 Zone 10

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